

COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES APPROPRIATIONS FOR 2014

HEARINGS BEFORE A SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS HOUSE OF REPRESENTATIVES ONE HUNDRED THIRTEENTH CONGRESS FIRST SESSION

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PART 8

STATEMENTS OF MEMBERS OF CONGRESS AND OTHER INTERESTED INDIVIDUALS AND ORGANIZATIONS



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COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES APPROPRIATIONS FOR 2014

**MEMBERS OF CONGRESS AND OUTSIDE WITNESSES
HEARING**

THURSDAY, MARCH 21, 2013.

VETERANS' DRUG COURTS

WITNESS

**HON. PATRICK MEEHAN, A REPRESENTATIVE IN CONGRESS FROM
THE STATE OF PENNSYLVANIA**

Mr. WOLF. The hearing will come to order.

I would like to welcome my colleague, Mr. Meehan, and Jennifer Lopez.

Unfortunately, there is a four-minute time limit and I apologize for it. That is just the way this place runs.

But, anyway, your full statement will appear in the record. We will go to Mr. Meehan first.

You are not covered by the light, and then go ahead.

Mr. MEEHAN. Mr. Chairman and Ranking Member Fattah, I am very grateful for giving us the opportunity to be with you today and for your continuing support for this important issue of courts that serve our veterans.

I could tell the story through the numbers, and you will see in the written testimony the effect it has had, the reduction of \$186,000 of costs to the Chester County court system by diversion and the fact that the statistics are demonstrating that they have nearly a complete record of those who enter these systems staying free of problems further with the system, recidivism being eliminated in many of the circumstances.

So it is a remarkable story of accomplishment, but I do not believe that you can really appreciate it through the numbers. It is really in the stories of the veterans themselves. Many who have served overseas return with injuries and are rehabilitated through this process.

I am delighted today to be joined by Ms. Lopez who has dedicated herself to the operation of one of the first two drug courts in Chester County, Pennsylvania. It is a story of redemption, success, and most important outreach to these important veterans.

So let me turn it over to Ms. Lopez.

Mr. WOLF. I am going to recognize Mr. Fattah. I apologize. Go ahead. You might have wanted to say something here.

Mr. FATTAH. I agree with what the chairman has said.

THURSDAY, MARCH 21, 2013.

**ADULT PROBATION AND PAROLE DEPARTMENT,
CHESTER COUNTY, PENNSYLVANIA**

WITNESS

JENNIFER LOPEZ, DEPUTY CHIEF

Ms. LOPEZ. Good morning, Mr. Chairman and Ranking Member Fattah.

It is my great honor to appear before you today to advocate for funding for veterans' treatment courts.

In 2010, Chester County was awarded grant funds through the American Recovery and Reinvestment Act to develop a veterans' treatment court.

One of our first encounters was with Robert D. You see him here before me. Robert was an Army veteran who had been deployed to Iraq for two tours of duty. While in combat, he was exposed to multiple IED explosions and sustained injuries which included extensive heart damage making him a hundred percent disabled at his honorable discharge at the age of 31.

In May of 2010, he entered the Chester County criminal justice system. Police responded to a report of a domestic disturbance. Robert was highly intoxicated and had to be tased to be taken into custody. He was charged with numerous violent offenses.

Our veterans' court team immediately mobilized. The veterans' justice outreach coordinator who is part of our team informed us that Robert had a history of failed treatment attempts, had overdosed on alcohol at least twice, and was experiencing flashbacks, nightmares, and was becoming aggressive and paranoid.

The district attorney who also sits on our team ran a background check and noted that all of his prior crimes occurred either during or immediately following his combat experience.

Robert was diverted from jail within hours of his commitment. He was placed in treatment at the VA and given a diversionary sentence.

We received the following letter from Robert:

I have been battling PTSD and alcoholism for several years now since returning home from Operation Iraqi Freedom. When I came home, I was haunted and embarrassed by the things I had done in Iraq. Trying to be a man and suck it up, I turned to alcohol and it worked.

"In May of 2010, I finally hit my bottom. I was out of my mind drunk again, combative with the police who were only trying to help me, and then made the mistake of trying to drive.

"I was sent to Chester County Prison with the assumption that my life was over. I had finally done it big time. With eight charges total pending against me and a seven-year prison term, I believed there was no hope left.

“Without the opportunity that veterans’ court has given me and my family, I truly believe I would be dead. When I speak to veterans at the VA in Coatesville, I often tell the story about how I was rescued by the Chester County judicial system. You can imagine that gets a laugh from a group of people in need of the same help I received and maybe are too proud to admit it. Robert D., U.S. Army, retired.”

In an already overtaxed criminal justice system, combat-related symptoms combined with substance abuse and violence can be overwhelming and misunderstood. Without the Chester County veterans’ treatment court, it is doubtful that Robert would have been diverted from jail and it is highly unlikely that he would have remained out of jail.

That initial ARRA grant funding gave us the ability to hire staff whose sole focus was identifying and screening veterans that entered the system, many of whom feel shame and have difficulty asking for help.

It afforded us the opportunity to build a team of veterans’ affairs and criminal justice professionals, many of whom are veterans themselves, our judge, Bill Kelly, our supervisor, who is here with me today, our probation officer. Even our drug testing technician is a veteran.

And that team looks beyond the criminal history and failed treatment to consider the facts and circumstances leading up to the offense and the additional stresses faced by the members of Armed Forces and were willing to take a chance.

We understand the veteran who drives 110 miles an hour and brandishes a weapon to someone who cut him off in traffic, the vet who is late for his eight a.m. appointment because he refuses to sleep while the rest of his house sleeps.

The program is not easy. It is not a get out of jail free card. Over the past two and a half years, we have diverted 31 vets who have entered the criminal justice system. Four have graduated. None of them have been rearrested.

Our veterans’ court is modeled after a successful drug court. According to the National Association of Drug Court Professionals, drug courts are the most successful, cost-effective, scientifically validated criminal justice intervention in the past 20 years.

Seventy-five percent of drug court graduates remain arrest free after two years. For every dollar invested in drug court, taxpayers save \$3.36 in criminal justice costs alone. When you add reduced victimization and healthcare utilization, that rises to \$27.00.

In order for all jurisdictions to effectively respond to and assist veterans, there must be support for the establishment and expansion of veterans’ treatment courts.

In closing, Abraham Lincoln said, “I have always found that mercy bears richer fruit than strict justice.” I believe that is the essence of what a treatment court does.

Make no mistake. We as a society and as taxpayers are paying for our struggling veterans one way or another and they pay the ultimate price. We should be wise about your choice and we should be socially and fiscally responsible.

Thank you.

[The information follows:]

Jennifer Lopez, Deputy Chief, Chester County Pennsylvania Adult Probation & Parole Department

Good Morning Chairman Wolf, and distinguished members of the Subcommittee on Commerce, Justice, Science and Related Agencies,

It is my great honor to appear before you today on behalf of Chester County Pennsylvania Adult Probation and Parole and criminal justice professionals throughout our Nation who have been tireless in their efforts to establish Veterans Treatment Courts to provide treatment, compassion and hope to veterans struggling in the criminal justice system.

My name is Jennifer Lopez and I currently serve as the Deputy Chief of Chester County Adult Probation and Parole De. In 2010, Chester County was awarded grant funds under the American Recovery and Reinvestment Act to develop a Veterans Treatment Court.

One of our very first encounters was with Robert D. an Army Veteran with six (6) years of active military service, having been deployed to Iraq for two (2) tours of duty. While serving in Iraq, he was exposed to numerous explosions from I.E.D.'s sustaining injuries from at least one 500 pound IED explosion. The blast knocked him unconscious, embedded shrapnel in his leg and caused extensive damage to his heart. As a result of these injuries, he suffered three heart attacks, has had six stints and a defibrillator surgically implanted. He was honorably discharged in 2007 and 100% service connected disabled. He was 34 years old.

In May of 2010 police responded to a report of a domestic disturbance. Robert was intoxicated and charged with Aggravated Assault, Resisting Arrest, Driving under the Influence, Terroristic Threats and Public Drunkenness; he had to be tased by police in order to be taken into custody. He was committed to Chester County Prison with a mug shot showing a broken and battered soul (he had a black eye and fractured eye socket from an altercation earlier in the day with a drug dealer).

Because of our partnership with the Coatesville VA Medical Center and the assignment of a Veterans Justice Outreach coordinator to our team, we quickly learned that Robert had a history of five inpatient treatment stays, numerous outpatient treatment attempts and had overdosed on alcohol twice. He had a history of nightmares, flashbacks, cold sweats, anxiety, and difficulty falling asleep, was becoming aggressive and paranoid and felt a need to protect his house. He had a criminal history of domestic assaults and driving under the influence charges that all occurred either during his military service or after his discharge.

Robert was diverted from jail within hours of his commitment. He was placed in treatment at the VA and given a diversionary sentence which kept him from serving jail time. We received the following from Robert:

I have been battling PTSD and Alcoholism for several years now since returning home from Operation Iraqi Freedom. When I came home I was haunted and embarrassed by the things I had done in Iraq. Trying to be a man and suck it up I turned to alcohol and it worked. Then my family suffered, I had no social life, and my children didn't want to be around me. In May of 2010 I had finally hit my bottom; I was out of my mind drunk again, combative with the police (who were trying to help me) and then made the mistake of trying to drive. I was sent to Chester

County Prison with the assumption that my life was over, I had finally done it big time. With eight charges total pending against me and a seven year prison term I believed there was no hope left.

Then by some miracle Carl showed up at the prison and identified me as a combat Veteran. He asked me if I wanted to get help. There was no question in my mind that I could not live that way any longer. So after several years of denying any problems, I decided to listen to what they had to say. Carl took me straight to the Coatesville VA where I underwent extensive alcohol and PTSD treatment for the next four months. That program saved my marriage and my life. I am still seeing counselors on a weekly basis and by choice to help other Veterans I also speak at the VA two or three times a month.

Without the opportunity that Veterans Court has given me and my family I truly believe I would be dead. My life today is spent going to school, coaching a baseball team for my son, and being the husband and father that for so long was missed by my family.

When I speak to Veterans at the VA in Coatesville I often tell the story about how I was “rescued” by the Chester County Judicial System. You can imagine that gets a laugh from a group of people in need of the same help I received and maybe are too proud to admit it. ~Robert D. US Army (Retired)”

Research suggests that even though veterans are no more likely than the general population to become involved in the criminal justice system, individuals suffering from PTSD are more likely to engage in violent criminal behavior as well as be arrested for driving under the influence and weapons charges.¹ Veterans are also twice as likely as non-veterans to become homeless, with the best predictor of homelessness for veterans being criminal justice involvement. Further complicating this is the fact that approximately 20 percent of male veterans between the ages of 18–24 are unemployed.² In a system already besieged by our society’s social problems, combat-related behaviors overwhelm the criminal justice system ill-equipped to deal with the complex combination of PTSD, TBI, substance abuse and violence.

Without the Chester County Veterans Court, it is doubtful that Robert would have been diverted from jail and unlikely that he would have remained out of jail. That initial ARRA grant funding gave us the ability to hire staff whose sole focus was identifying and screening veterans that entered the system, many of whom feel shame and have difficulty asking for help. It afforded us the opportunity to build a team of Veterans Affairs and criminal justice professionals (many of whom are veterans themselves) who looked beyond a criminal history and failed treatment to consider the facts and circumstances leading up to the offense and the additional stresses faced by members of our Armed Forces and take a chance. It made available specialized training so that our team (Judges, District Attorney, Public Defender, Probation, Bail and the VA) better understood the issues that a veteran may be struggling with such as PTSD, Traumatic Brain Injury, and military sexual trauma. We understand the veteran who drives 110 miles per hour and brandishes a weapon to someone who cut him off in traffic; the vet who is late for an 8 a.m.

¹ Holbrook, Justin, and Sara Anderson. 2011. *Veterans Courts: Early Outcomes and Key Indicators for Success*, Widener Law School Legal Studies Research Paper Series no. 11-25. Widener School of Law: 9 August 19.

² (The Honorable) Russell, Robert. *The Ten Key Components of Veteran’s Treatment Court*. PowerPoint

appointment because he refused to sleep while the rest of his house slept, or the vet who relapses every 90 days because she has yet to deal with her military sexual trauma and we react differently. We recommend more treatment instead of punishment and we are able to access that treatment quickly because the VA is part of the team.

We are fortunate in Chester County to have a Common Pleas Judge, a veteran himself, committed to lead the Veterans Court and hold regular status hearings or Veterans Court sessions to monitor our veteran's progress. These "veteran only court sessions," that also include volunteer veteran mentors, capitalize on military culture, re-instilling a sense of camaraderie felt while in the military.

The program is not a get out of jail free card; there is mandatory treatment, frequent and random drug testing and veterans must submit to intensive supervision all to ensure they stay on track. Business as usual supervision does not provide the structured environment that most veterans respond to based on their experiences in the military. Without this specialized supervision that requires accountability on the part of the veteran and insight on the part of the team, there is a high likelihood that these veterans will reoffend and plunge deeper into the criminal justice system.

Over the past 2 ½ years, we have screened over 600 veterans who have entered the criminal justice system. Non-combat veterans are triaged and set up with services at the VA. Eligibility for Veterans Court includes combat veterans who suffer from Traumatic Brain Injury, Post Traumatic Stress Disorder, Military Sexual Trauma, psychological and/or substance abuse problems as result of having served in a combat theater. We have successfully diverted 15 veterans into Veterans Court. Four veterans have successfully graduated from the program and not one of them has been rearrested. By using the sentencing guidelines vs. the actual sentence imposed we have calculated that through diversion to Veterans Court there has been a cost savings of \$186,462.00 in jail days.

Program Statistics:

684	veterans have been screened for Veterans Court
16	diverted to pre-existing diversion programs
15	have been accepted into Veterans Court
10	are currently active in the program
4	have graduated from the program
0	rearrest after graduation

Through diversion to Veterans Court, Jail Days Saved: **2,302 days x \$81 = \$186,462.00**

These early statistics are promising, one of the first Veterans Treatment Courts established in 2008 under the leadership of Judge Robert T. Russell in Buffalo New York has graduated 90 veterans, zero have been arrested post-graduation. A recent 2011 study by Widener University School of Law concluded that the recidivism rates of veterans treatment courts is similar or possibly lower than other specialty courts (Holbrook, page 40).

Veterans Treatment Courts are modeled after Drug Courts, the most successful, cost effective, scientifically validated criminal justice intervention in the past 20 years. Drug Courts work

better than jail or prison and better than probation and treatment alone. According to the National Association of Drug Court Professionals, Drug Courts significantly reduce drug use and crime and are more cost-effective than any other proven criminal justice strategy.

- Nationwide, 75% of Drug Court graduates remain arrest-free at least two years after leaving the program.
- Nationwide, for every \$1.00 invested in Drug Court, taxpayers save as much as \$3.36 in avoided criminal justice costs alone.
- When considering other cost offsets such as savings from reduced victimization and healthcare service utilization, studies have shown benefits range up to \$27 for every \$1 invested.
- In 2007, for every Federal dollar invested in Drug Court, \$9.00 was leveraged in state funding.

Chester County has had a successful Drug Court since 1997, the 2nd in Pennsylvania starting a few months after Philadelphia. Our Court has participated in the National studies that produced the outcomes outlined above. Veterans Court was built upon our success with Drug Court, maintaining the core elements that make Drug Courts successful and adding key components to meet the specialized needs of our Nation's struggling veterans.

We have been relentless in maintaining Veterans Court in Chester County since the end of our ARRA grant funding. Our entire staff dedicates their time to Veterans Courts in addition to other responsibilities. We are not unlike many jurisdictions, creating local projects driven by individual judges and military service members who saw a need in our community, but we can no longer do it alone. In order for all jurisdictions to effectively respond to and assist the growing number of veterans entering the criminal justice system by establishing and expanding Veterans Treatment Courts there must be support. It is time to make Veterans Courts available to all those in need.

In closing, Abraham Lincoln said, "I have always found that mercy bears richer fruits than strict justice." Make no mistake, we, as a society and as taxpayers, are paying for our struggling veterans one way or another and they pay the ultimate price. We should be wise about our choice and we should be socially and fiscally responsible.

Respectfully Submitted

Jennifer Lopez

Mr. WOLF. I want to thank you both.

Mr. Meehan brought this to us last year. There is in the bill that we are going to pass today \$3.9 million for veterans' courts.

And, you know, I plan on supporting this next year. I think it is very, very important. The fact is I am going to get all the information and send it to my governor, too, because I think it makes a lot of sense.

So I want to thank you and I want to thank Ms. Lopez.

Ms. LOPEZ. Thank you, Mr. Chairman.

Mr. WOLF. Mr. Fattah.

Mr. FATTAH. I as a younger legislator in the Pennsylvania Senate was the only legislator that worked with the Supreme Court on creating our drug courts in Pennsylvania and I support the veterans' courts.

This morning, I had breakfast with General Eric Shinseki, the secretary of the VA. And I also think that there are opportunities for us to think about how the VA can be supportive of these activities because I think that your example shows that this can work in other areas throughout the country.

So thank you, Mr. Chairman.

Mr. WOLF. I think you ought to write every governor, frankly. The report I saw, there are 21 suicides a day and we owe these men and women so much.

You know, thank you for bringing the idea to us and, Ms. Lopez, thank you for being here.

Ms. LOPEZ. Thank you for having me.

Mr. MEEHAN. Mr. Chairman, again, thank you for not only your leadership but your vision.

And these are things that just do not make sense dollar wise. As you said, they save lives for those who have put their lives on the line for us.

Thank you.

Mr. WOLF. Thank you.

Mr. MEEHAN. Thank you, Ranking Member.

Mr. WOLF. The next witness will be Gabrielle Martin, National Council of EEOC Locals.

Welcome. And the light is going to go on. I apologize, but—

Ms. MARTIN. That is okay. I thank you and I appreciate that.

Mr. WOLF. Welcome again. Yeah, thank you.

THURSDAY, MARCH 21, 2013.

NATIONAL COUNCIL OF EEOC LOCALS

WITNESS

GABRIELLE MARTIN, PRESIDENT

Ms. MARTIN. Good morning, everyone.

I want to thank Chairman Wolf, Ranking Member Fattah, and other Members of this subcommittee for the opportunity to provide testimony regarding the challenges faced at EEOC and the EEOC's budget for fiscal year 2014.

I also want to thank all of you for your efforts in the past to increase EEOC's budget.

As you know, the union is the exclusive representative of the bargaining unit employees which include investigators, mediators, attorneys, administrative judges, and all of our support staff.

The work we do is important because EEOC was created by bipartisan legislation in 1964 and the passage of that act was all about jobs, people being able to get and keep jobs free from illegal discrimination in the workplace. But that promise to workers is being broken and sequestration and furloughs will just hurt workers more.

Now, EEOC's budget largely funds salaries and rental costs. So even though we get \$360 million, 80 percent or more is salaries and rental costs. That budget was cut in fiscal year 2011 and we have been operating with \$6 million less per year. That means hiring is frozen and we now are down to 2,245 employees.

That is important because in the last five years, every year we have seen an incremental increase in the number of charges coming in the door. At the same time, our staffing has fluctuated.

And if you look at the chart on page five, you will see there is a great correspondence between when we have sufficient staff and our ability to manage our backlog and reduce it as well as reduce case processing times.

Currently case processing times are at nine months. We ended last year with 78,000 cases backlogged. And the EEOC is predicting that these continued budget cuts and furloughs will mean that within the next year, we will have 98,000 cases backlogged. That means that both the victims of discrimination suffer as well as the employers.

EEOC is now planning eight and a half days of furloughs, so we expect that both the processing time will go up as well as the backlog. And what that means for new people coming to us is that they now experience about 28 minutes before they get to talk to someone to even say, "I think I have a case, what should I do, where should I go?"

That is troubling, and with those increases will come another factor because to manage some of the budget cuts, EEOC is cutting funding to our state FEPAs which means we are going to get somewhere between 1,500 and 2,500 cases in the next year because we cannot fund those.

So our ask is that the subcommittee recommend restoring our budget to the \$367 million mark. It is one you supported in the past. And, again, we appreciate that.

We are also looking for some oversight for some EEOC's questionable practices. They still refuse to implement the union's cost-efficient and effective intake plan. OPM has recently used such a plan where they concentrate staff to get the front-end information so people who have to adjudicate and investigate get a file that they can actually go out and investigate right away, thereby reducing waiting times and allowing those investigators to investigate instead of doing front-end intake.

On top of that, we are seeking oversight for our federal sector programs where we have got some pilots out which may impede a complainant's ability to have discovery and a hearing in those cases.

So, again, I thank you for the opportunity to address you this morning.
[The information follows:]

**STATEMENT OF GABRIELLE MARTIN, NATIONAL PRESIDENT
NATIONAL COUNCIL OF EEOC LOCALS, NO. 216, AFGE/AFL-CIO
TO
THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON
COMMERCE, JUSTICE, SCIENCE AND RELATED AGENCIES
ON
FY14 APPROPRIATION FOR EEOC,
INCLUDING RESTORING FUNDING FOR EEOC TO AVOID FURLOUGHS AND
REDUCE 70,312 CASE BACKLOG AND 9 MONTH PROCESSING TIMES
AND OVERSIGHT FOR EFFICIENCIES SUCH AS FULL SERVICE INTAKE
March 21, 2013**

Chairman Wolf, Ranking Member Fattah, and members of the Subcommittee, my name is Gabrielle Martin and I am the President of the National Council of EEOC Locals, No. 216, AFGE/AFL-CIO. The Council is the exclusive representative of the bargaining unit employees at the Equal Employment Opportunity Commission (EEOC), including investigators, attorneys, administrative judges, mediators, paralegals, and support staff located in 53 offices around the country. I want to thank you for the opportunity to share our views today on funding EEOC for FY14. The Council expresses our appreciation that, despite an immensely tight budget year, this Subcommittee recommended restoring EEOC's FY13 budget to \$367M, i.e., the same funding level as FY10/11 prior to a 2% across the board cut in FY12 that reduced the budget to \$360M. Unfortunately, the original FY13 continuing resolution (CR) carried over the FY12 cut for the first two quarters of FY13. Now with sequestration, EEOC must cut an additional \$18M or 5% in FY13. These cuts come on the heels of five years of record high EEOC charge filings. Prior to sequestration, EEOC had already lost 10% of its staff, leaving the agency with only 2,245 FTEs nationwide. Now, EEOC intends to furlough the entire staff, but not contractors, for 8.5 days, to absorb a shortfall that the agency stated it was unable to find from other expenses.¹ EEOC estimates sequestration cuts will cause the backlog to climb from 70,312 in FY12 to 98,000 by FY14. The current nine month processing delays will only get worse. Therefore, the Council urges this Subcommittee to stop sequestration or at least for FY13 support the Senate Appropriations Committee substitute CR, H.R. 933, which funds EEOC at \$370M,² a level that should avoid furloughs. The Council requests this Subcommittee's continued support to ensure that EEOC can effectively fulfill its vital mission to enforce workplace discrimination laws that help Americans get and keep jobs, by including bill and report language for FY14 which: (1) supports restoring EEOC's funding to at least \$367M, i.e., FY10/FY11 level as was recommended in H.R.112-463; (2) directs EEOC to avoid furloughing frontline staff by cutting unnecessary contracts, travel, training and conferences; (3) directs EEOC to use any authorized hiring to backfill frontline positions; (4) requires EEOC to implement efficiencies, like piloting the Cost Efficient Full Service Intake Plan and saving on space through voluntary expanded telework; (5) maintains oversight of headquarters and field restructuring, including the Office of Federal Operations; and (6) requires EEOC to finally pay its debt to employees for willfully violating overtime laws since 2006, pursuant to the Federal arbitrator's final decision of March 23, 2009.

¹ To reduce the number of furlough days, the agency should cut contracts, training conferences for the public, and management travel.

² The Council supports this full amount, notwithstanding that it is subject to a 1.877% across the board reduction.

Introduction:

The EEOC was created by the Civil Rights Act of 1964. The EEOC's jobs focused mission is to enforce this nation's laws which protect against discrimination in employment based on race, color, religion, sex, national origin, age, and disability. As of 2009, Congress added to EEOC's enforcement responsibilities three new laws, i.e., the Americans with Disabilities Act Amendments Act (ADAAA), Genetics Information Nondiscrimination Act (GINA) and the Lilly Ledbetter Fair Pay Act. In the last five year period, a record number of applicants and workers came to the EEOC for help getting a fair shot in the workplace. The good news is that for the second consecutive year, EEOC was actually able to modestly reduce its backlog of cases by 10%. The bad news is that EEOC still ended FY12 with a staggering 70,312 case backlog and dismal 9 month average processing times, which will only get worse due to shrinking staff and fewer available work days, resulting from furloughs. Delays caused by the backlog are bad for workers and employers. Also, constituent complaints to Congressional offices will increase. This Subcommittee can help by supporting additional funding for EEOC, in the amount of at least \$367M and providing report language directing EEOC to implement common sense efficiencies, like the full service intake plan.

Sequestration is Detrimental to EEOC's Ability to Carry Out its Civil Rights Mission:

Sequestration puts a particular strain on EEOC, because the agency is already so small (2,245 FTEs nationwide) and most of its budget goes to payroll and rent. Moreover, while some lawmakers have referenced a plan to hire one new employee for three departing employees, EEOC's hiring freeze has allowed almost no backfills. While some lawmakers have advocated for 10% staff reductions through attrition, EEOC has already met that reduction. Discrimination charge filings have gone up, with 999,412 filed in FY12, although EEOC staffing has declined.

EEOC's previously reduced budget of \$360M stands to be slashed to \$342M, below FY09 levels, by September 30, 2013. To absorb sequester cuts, EEOC intends to furlough its entire staff for 8.5 days from April 22 through September 6, 2013. This is a 10% reduction in staff available during this period. Fewer staff working fewer days and keeping intake open to accept discrimination charges, will cause complaints to stack up.

The negative impact of the 1995 government shutdown on EEOC is instructive of the harm that will be caused by sequestration. During the shutdown the backlog jumped to over 97,000, calls were not returned and victims of discrimination were fired in the interim. Charging Parties, who were dying of cancer and AIDS, saw their depositions delayed. Settlements fell through.

While furlough days under sequestration will be spread out, the entire agency staff will be taken away from their workload for 8.5 days. EEOC estimates that by FY14 the backlog will jump to 98,000. The Senate substitute CR, H.R. 933, funding EEOC for FY13 at \$370M, is a better alternative, because if EEOC properly prioritizes, then it should avoid damaging furloughs.

This Subcommittee should direct EEOC to avoid frontline staff furloughs by cutting unnecessary expenses. In particular, EEOC needs to reign in contracts for work or items that can be found in-house, e.g., evaluations of work practices, tracking service of EEOC related legislation, conference space, and mediations within 75 miles of offices. Additionally, while other agencies are canceling training events, EEOC's website is advertising for a Leadership Training Workshop in Chesapeake Bay. EEOC pays for managers to travel to meetings, for office visits, and to perform meet and

greet functions at EEOC's public training events. This travel wastes money, given that EEOC has equipped all offices with video conference capabilities, including new television monitors.

Support Restoring EEOC's Funding for FY14 to at least \$367M:

FY12 represents the EEOC's fifth year of historically high charge filings, even as EEOC has lost 10% of its staff since FY11. High charge filings will not drop anytime soon, due to EEOC's expanded enforcement authority over three new laws (ADAAA, GINA, and Ledbetter) since 2009 and the still struggling economy. The FY12 charges of discrimination totaled 99,412. Since 2009, there has been an 18% increase in disability filings, which are complex and time intensive. Record high retaliation charges may also be attributed to EEOC's processing delays.

The chart included with this testimony illustrates EEOC's troubling customer service trends. EEOC's backlog crisis was at its worst when it jumped 35% in FY07 and again in FY08. The runaway backlog was caused by increased charge filings, a 25% reduction in staffing levels due to a multiyear hiring freeze, and several years of flat-funding. Undisputedly, EEOC did not have the resources to serve the public by 2008. In this context, President Bush requested a budget and staffing increase for EEOC for FY09, as did President Obama the next year. Congress enacted both requests. With this support, EEOC has been able to modestly reduce the backlog.

But now, with the FY12 and FY13 budget/sequester cuts, EEOC is going to return to the days of exploding backlogs. EEOC's current staffing of 2,245 has already declined to close to FY08's rock-bottom levels. EEOC intends to reduce funds to state and local enforcement agencies, causing over 2,100 charges to come back to the EEOC and add to the backlog. Therefore, the Council respectfully requests that this Subcommittee support additional funding for EEOC to take charge of its backlog and allow for backfills of frontline positions.

EEOC Should Implement Efficiencies To Save Money and Improve Service to the Public:

For several years, the Council has shared with this Subcommittee common sense solutions that EEOC should implement to improve services. Unfortunately, the agency has continually failed to take action. Therefore, the Council respectfully requests report language to provide oversight.

(1) Direct EEOC To Finally Pilot The Cost-Saving Intake Plan To Help the Public:

For three years, EEOC has not acted on a Cost Efficient Full Service Intake Plan. On February 22, 2012, EEOC approved a new strategic plan, which completely fails to mention the plan.

This Subcommittee's FY13 Report Language emphasized, "The Committee expects the EEOC to continue to prioritize inventory reduction and to examine new ways to address the backlog and increase productivity." The Union's intake plan does exactly this by staffing each field office with a compliment of positions and grades (GS-5 through GS-9) able to advance the intake process from pre-charge counseling through charge filing. The plan produces costs savings by not pushing the intake work to GS11-12 investigators. In turn, investigators can focus on investigating cases and reducing backlog and processing times.

The plan also integrates the in-house call-center staff, i.e., Intake Information Representatives (IIRs), who already are classified as Investigator Support Assistants (ISAs) but perform only phone answering duties, into dedicated intake units where they would perform the full range of ISA duties. It is more critical than ever to transition away from the flawed in-house call center

model because staffing has plummeted from 64 to 23 IIRs answering 25,000 calls a month. This IIR shortage has caused wait times to average 28 minutes.

EEOC's Quality Control Strategic Planning Team rushed to have a meeting about the intake plan with Council 216 in February. The logical next step would be an intake plan pilot, but the agency has not agreed to any tangible next steps. Therefore, the Council respectfully requests that report language direct EEOC to finally implement a pilot of the Full Service Intake Plan.

(2) Make EEOC Flatten Supervisor to Employee Ratio to 1:10 to Increase Frontline Staffing:

EEOC's 2006 field restructuring promised to improve the ratio to 1:10. This has not happened. Any exceptions to the current hiring freeze should be used to hire frontline staff to serve the public, instead of more costly managers. The Council requests that FY12 conference language supporting the frontline be included again for FY14:

In order to advance EEOC's backlog reduction goals, the conferees expect the EEOC to prioritize efforts both to address the inventory of private sector charges, such as through hiring or backfilling positions of frontline mission critical staff . . .

Reducing supervisor to employee ratios is also a budget neutral way for EEOC to increase frontline staff. EEOC should provide this Subcommittee a roster with job titles and numbers for each office and a plan to redeploy supervisors, who exceed the 1:10 ratio, to the frontline.

(3) Require That EEOC Reduce Rental Costs By Using Voluntary Telework:

EEOC should belatedly heed the Administration's call for efficiency and cost savings, per the Telework Enhancement Act of 2010, by using expanded telework to reduce rental costs. The Council is also aware telework is well supported by the leadership of this Subcommittee. EEOC's Office of Inspector General supports the premise, "we believe the EEOC is in an ideal position to use [frequent] telework to achieve major infrastructure cost savings." Management Advisory on the Potential for Real Estate Cost Savings Through Telework (OIG-2011-02-AEP). [footnote omitted]. Nevertheless, EEOC continues leasing the same or even greater space, not accounting for the reduction of needed space if employees voluntarily teleworked most days. Space/rental savings could then be shifted to backfilling frontline positions.

Bill Language Should Retain Oversight of EEOC Restructuring:

EEOC's 2006 field restructuring and the way it was carried out drew concerns from House and Senate CJS Subcommittees. The field restructuring added bureaucratic layers, but no frontline staff. EEOC has stated in the past that it plans to restructure its headquarters. The Council urges the Subcommittee to retain bill language regarding oversight of restructuring, because this remains a topical concern. Additionally, Congress should ensure a transparent process for public and internal stakeholders to have an opportunity to provide feedback to a draft plan.

Federal Employees Must Have Rights to Discovery and Full and Fair Hearings before AJs:

EEOC recently revised regulations to allow Federal agency complaint processing pilots. EEOC should only approve pilots that call for complete, timely, and impartial investigations. Requiring EEOC to report any approved pilots would provide valuable oversight.

EEOC's Strategic Plan calls for "[r]igorous implementation of a new case management system for federal sector hearings and appeals" by FY13. Arbitrary designations resulting from a new case management system have the potential to undermine regulatory authority granting Administrative Judges (AJ's) independence and control over hearings/discovery. The system appears strikingly similar to its controversial predecessor, the "Fast Track" proposal. "Fast Track" would have adopted the agency's record, which would prevent victims of discrimination from developing an adequate record to support their claims. Subpoena authority for AJ's is also needed to compel testimony of non-agency witnesses. Thus, Council 216 supports language similar to the FY10 Conference Committee report requiring oversight of Federal sector reform.

Require EEOC to Compensate Its Workers for Willful Overtime Violations:

A Federal Arbitrator determined that between 2006 and 2009, EEOC willfully violated overtime laws and that the remedy was liquidated damages for employees who worked overtime. EEOC should ensure that its operating plan for FY14 projects necessary funding for employee overtime payments for the current claims process phase of the arbitration decision.

Conclusion:

In closing, I want to again thank the Chairman, Ranking Member and the Subcommittee for inviting me to testify. I hope my statement provides insight into EEOC's difficult challenges. Council 216 urges the Subcommittee to include bill and report language in the FY14 funding measure which: (1) supports restoring EEOC's funding to at least \$367M, i.e., FY10/FY11 level as was recommended in H.R.112-463; (2) directs EEOC to avoid furloughing frontline staff by cutting unnecessary contracts, travel, training, and conferences; (3) directs EEOC to use any authorized hiring to backfill frontline positions; (4) directs EEOC to implement efficiencies, like piloting the Cost Efficient Full Service Intake Plan and saving on space through voluntary expanded telework; (5) maintains oversight of headquarters and field restructuring, including the Office of Federal Operations; and (6) requires EEOC to finally pay its debt to employees for willfully violating overtime laws since 2006, pursuant to the Federal arbitrator's final decision of March 23, 2009.

CHART: EEOC'S TROUBLING CUSTOMER SERVICE TRENDS

	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12
1 FTEs	2,924	2,787	2,617	2,462	2,349	2,250	2,137	2,174	2,192	2,385	2,454	2,346 ³
2 Investigators	846	829	785	730	711	653	650 est.	646	650	717	764	700 est.
3 Backlog	32,481	29,041	29,368	29,966	33,562	39,946	54,970	73,941	85,768	86,338	78,136	70,312
4 % Backlog increase	N/A	-10%	+1%	+2%	+12%	+19%	+38%	+34.5%	+16%	+7%	-10%	-10%
5 Charges Filed	80,840	84,442	81,293	79,432	75,428	75,768	82,792	95,402	93,277	99,922	99,947	99,412
6 Resolutions	90,106	95,222	87,755	85,259	77,352	74,308	72,442	81,081	85,980	104,999	112,499	111,139
7 Avg. Charge Processing	182	171	160	165	171	193	199	229	294	313	293	288

³ As of January 2013 the agency is down to 2,245 FTEs.

Mr. WOLF. Well, thank you for your testimony.

I have no questions, but I just think hopefully we can come up with some grand bargain that eliminates the sequestration certainly for the next nine years and maybe even for the rest of this year. But I can see it is going to be very, very difficult.

Mr. Fattah.

Mr. FATTAH. I would just take note that the bill that is on the floor does provide a slight increase in the EEOC of \$3 million. So we are making some progress.

Ms. MARTIN. And we thank you for that and we hope that will be acted on accordingly. Thank you.

Mr. WOLF. Thank you very much.

The next witness will be Howard Silver, Consortium of Social Science Associations.

Welcome.

Mr. Fattah, do you have any comments?

Mr. FATTAH. Welcome.

THURSDAY, MARCH 21, 2013.

CONSORTIUM OF SOCIAL SCIENCE ASSOCIATIONS

WITNESS

HOWARD SILVER, PH.D., EXECUTIVE DIRECTOR

Mr. SILVER. Good morning, Mr. Chairman, Mr. Fattah.

I am Howard Silver, the executive director of the Consortium of Social Science Associations, and it is nice to be back before you.

The consortium represents 115 professional associations, activist societies, universities, and research institutes, and our membership list is attached to my testimony.

Given that we do not have any budget numbers for fiscal year 2014 out of the Administration, COSSA is simply asking you to restore the sequestration numbers of NSF and NIJ and BJS and to continue the set-aside that you have been supporting for the last few years, the justice programs for the National Institute of Justice and the Bureau of Justice statistics.

Quickly, the importance of NSF to the SBE sciences is very high, 62 percent of basic research in these disciplines conducted at universities in support of NSF and in some disciplines like political science, it is 95 percent of that support.

Let me just rattle off the importance of the sciences to the Nation. My written testimony provides examples.

First of all, at a House science hearing recently on cyber security, three witnesses from the private sector talked specifically about the importance of the social behavioral sciences to cyber security. It is not just an engineering problem as they said.

We have contributed to transformative research from our Nobel Prize winners, Elinor Ostrom, a political scientist, and Daniel Kahneman, a psychologist. Both have won the Nobel Prize in economics. That has transformed our thinking about collective and individual decision making. And it also illustrates the importance of interdisciplinary research.

Thirdly, our scientists have done a lot of work on disaster research both in terms of communications warning, in terms of people's behavior during disasters, and in terms of resilience afterwards.

And on April 25th, there will be a briefing sponsored by the House R&D caucus and the Coalition for National Science Funding that will have speakers talking about these issues, geographic information systems that transform state and local government, businesses, and how police operate.

It has generated a multi-billion dollar industry that started with NSF support for the National Center for Graphic Information and Analysis back in the 1980s.

Youth violence research, you had the hearing on Tuesday. The report prepared for you by the social, behavioral, and economic sciences directorate I think gave an indication of what people can do and the importance of the support that NSF gives the research in this area.

The initiative on neuroscience which Mr. Fattah and with your support, Mr. Chairman, has become increasingly important for NSF. And as Mr. Fattah noted on Tuesday, there is a major solicitation out. SBE's behavioral and cognitive science division has been doing research in this area for a long time and will continue to do so.

Shifting gears to the National Institute of Justice and the Bureau of Justice Statistics, James Q. Wilson, who gave us the broken windows theory, argued that it was very important to have a federal role in crime research and statistics.

The National Institute of Justice has done an important job in transforming themselves over the last years to become a major science agency with peer review, randomized control trials, and the crimesolution.gov dissemination.

There is an emphasis on translational criminology, putting research into practice. The Harvard executive sessions have been very important on policing and corrections. Chief Bueermann who you are going to hear from has participated in those. There is a lot of cooperation with NAS, incarceration and crime reduction roundtables.

Thank you for your support of the NCVS redesign of BJS. And I thank you for the opportunity for letting me talk to you again this year.

[The information follows:]

Testimony of Howard Silver, Executive Director, Consortium of Social Science Associations (COSSA), to the House Commerce, Justice, Science Subcommittee, House Appropriations Committee. Honorable Frank Wolf, Chairman. March 21, 2013.

Mr. Chairman and Members of the Subcommittee:

My name is Howard Silver and I am the Executive Director of the Consortium of Social Science Associations (COSSA). The Consortium represents 115 professional associations, scientific societies, universities and research institutes concerned with the promotion of and funding for research in the social, behavioral and economic sciences. COSSA functions as a bridge between the research world and the Washington community. A list of COSSA's membership is attached.

COSSA appreciates the opportunity to comment on budgets for the National Science Foundation (NSF), the National Institute of Justice (NIJ) and the Bureau of Justice Statistics (BJS). Given the sequester, the continuing budget disputes, and the lack of the President's proposed FY 2014 budget, COSSA does not recommend any specific numbers for these agencies' appropriations for FY 2014. COSSA strongly requests that the Committee recommend a generous increase for NSF over its final FY 2013 budget to restore funds lost by the sequester. In particular, we endorse enhanced funding for its Research and Related Activities and Education and Human Resources accounts.

The NIJ and BJS have been underfunded for so long that as two National Academies' reports have noted they also need enhanced resources to fulfill their missions. We strongly appreciate the Subcommittee's support for the set-aside of Office of Justice Programs' funds for these two agencies. All three of these agencies significantly impact federal support that social and behavioral scientists receive to investigate issues important to the nation's future. NSF's Social, Behavioral and Economic Sciences (SBE) directorate provides 62 percent of federal funding for basic research in these sciences at U.S. colleges and universities. In some disciplines, such as political science, it is close to 95 percent.

COSSA is well aware that each year the Subcommittee confronts difficult choices among competing agencies under its jurisdiction. Especially in this era of budget reductions, we hope that you can provide sufficient funding for these agencies so that we do not curtail this nation's capacity for scientific research, education, and evidence-based policy making. COSSA appreciates your generosity to these agencies in the past and hopes that this can continue.

NSF

It is discouraging that the last time I was here, in 2011, the Administration was proposing a FY 2012 NSF budget of \$7.8 billion. Barring unforeseen developments, the FY 2013 budget will be around \$6.9 billion. COSSA strongly hopes that in considering the FY 2014 budget, the Subcommittee will lead the Congress in restoring the lost funds for NSF, which is still the world's premier basic science agency supporting ALL the sciences.

COSSA regrets the departure of Dr. Suresh as director after his all-too-brief tenure. We applaud the elevation of Dr. Cora Marrett to Acting Director. As someone who has served in that

capacity before as well as Deputy Director and leader of two of NSF's directorates, she is well-qualified and experienced to lead the Foundation. COSSA hopes that the Administration would give her strong consideration for the Director's position.

COSSA was also deeply disappointed by the House's action in 2012 to prohibit funding for NSF's political science program. The Political Science Program supports scientific research that creates knowledge critical for making our own democracy stronger, for understanding the actions of nations around the world, and for achieving efficiencies and fairness in our public policies. Like all scientific endeavors, its researchers follow the scientific method of developing hypotheses, testing them through data collection and analysis, and producing publishable results while archiving the data for replication. Political science does not take sides or make decisions about values. It provides data for understanding political processes and identifies generalizable relationships. This research is used, mostly without acknowledgement, by decision makers in this legislative branch, the executive branch, and in capitals around the world. The research saves lives, analyzes political upheaval, increases competitiveness, and explains democratic governance.

Research in the social, behavioral and economic sciences (SBE) and its directorate at NSF have and will continue to contribute mightily to this nation and the world. At a hearing on Cybersecurity in the House Science, Space, and Technology on February 26, three witnesses, all with experience in the private sector, made clear the importance of research on human behavior to deal with this important national security issue. A former Vice President at McAfee told the panel: [Cybersecurity] is "no longer an engineering discipline. It requires deep involvement from economists, sociologists, anthropologists and other scientists to create holistic research agendas..." In addition, an acknowledged key paper in this area, "Risk in Networked Information Systems," was written by University of Michigan political scientist Robert Axelrod. NSF needs to play a key role in supporting this interdisciplinary research.

NSF and its funders have always fostered the notion of "transformative research." Here are two from the SBE disciplines that have hugely changed our thinking about an important topic. The late Elinor Ostrom of Indiana University and Daniel Kahneman of Princeton University both won the Nobel Prize in economics, even though Ostrom was trained as political scientist and Kahneman as a psychologist. Both made tremendous contributions to the understanding of decision making; one by collectivities and the other by individuals. Ostrom, according to the Nobel Committee, in her analysis of economic governance: "Challenged the conventional wisdom by demonstrating how local property can be successfully managed by local commons without any regulation by central authorities or privatization." Kahneman, again from the Nobel citation: "Integrated economic analysis with fundamental insights from cognitive psychology, in particular regarding behavior under uncertainty, thereby laying the foundation for a new field of research."

NSF has also recognized the importance of research on disasters. Two areas of studies are risk communication and resilience. H. Dan O'Hair, of the University of Kentucky and his team used demographic, socioeconomic, physiological, and psychological data to improve the accuracy and efficacy of advisories and warnings for weather systems leading to improved communication of hurricane information that promotes more effective protective decision-making, thus saving lives and property. They now have an I-CORPS grant to examine the potential of extending the

scientific knowledge gained from the NSF-supported studies to improving private communication platforms. The NSF-supported work of Roxane Cohen Silver of the University of California, Irvine, has contributed to our understanding of how people cope with disasters, from the September 11th tragedy to earthquakes and firestorms. Both O’Hair and Cohen will be participants in an April 25th congressional briefing, co-sponsored by the House R&D Caucus and the Coalition for National Science Funding.

Another area of innovation in the SBE sciences remains the contributions of interdisciplinary research, including geography, responsible for the creation of Geographic Information Systems (GIS). NSF’s support of the National Center for Geographic Information Systems and Analysis in the mid-1980s spearheaded the development of what is now a multi-billion GIS industry. These systems are now applied by states, counties, and localities, supplying the backbone of crime mapping activities that have played such an important role in the crime reduction America has experienced in the past two decades. GIS is also used by the private sector to improve delivery systems and store location planning.

As you know, the SBE directorate has funded significant amounts of research on youth violence that was summarized in a report recently produced for this Subcommittee. We are also grateful that SBE is supporting and enhancing access to the three Gold Standard Surveys – the Panel Study on Income Dynamics, the General Social Survey and the American National Election Studies. Each of these has painted a unique longitudinal portrait of Americans’ economic, social, and political attitudes and behavior, so important for policy making at all levels of government.

COSSA also welcomes the inter-agency neuroscience initiative and thanks the Subcommittee for its support. Under the direction of OSTP’s Philip Rubin, former Director of the SBE’s Division of Behavioral and Cognitive Sciences (BCS), the initiative is moving ahead examining many challenges, including those presented by the proposed Decade of the Brain. The BCS division has strongly supported research in cognitive science and the neuroscience of cognition and behavior, such as language learning and usage, thought, decision making, and social processes. It is now soliciting proposals, especially interdisciplinary ones, to extend the research to include adaptation to changing environments as well as neural mechanisms underlying dynamic decisions and communication.

The Education and Human Resources Directorate has transformed itself with a renewed emphasis on research and evaluation of STEM programs. COSSA strongly supports this and we are delighted that NSF has improved its inclusion of the SBE sciences as part of the “S” in STEM. Not only is it usually SBE scientists who conduct the research and evaluation studies, but it is important that these sciences are seen as an integral part of K-12 education in this country. They have a lot to offer elementary and secondary students.

COSSA applauds NSF’s continued interest in broadening participation of underrepresented groups in the sciences. Working with NSF and NIH, the COSSA-led Collaborative on Enhancing Diversity in the Sciences has held two workshops on the issue. The latest was held in May 2012 and the report will be available shortly. We also thank NSF for providing two speakers for the event, Dr. Marrett, and Kellina Craig-Henderson of the SBE directorate.

Again, we hope the Subcommittee can restore NSF's lost funding during the FY 2014 appropriations process to keep America's scientific prowess in ALL disciplines intact.

NIJ and BJS

The distinguished criminologist, the late James Q. Wilson, who helped disseminate the “broken windows” theory that led many big-city mayors to confront crime and delinquency resulting in significant decreases in criminal activities in the past 15 years, argued that the federal government can be and should be the research and development arm of the criminal justice system supporting research and data collection, analysis, and dissemination. The NIJ and BJS have been the key agencies for this purpose. Their recently departed leaders John Laub and James Lynch brought professionalism and the knowledge gained from their careers as scientists to their positions. We hope similarly qualified people will soon be appointed to replace them. The NIJ has played a key role in designing and testing crime prevention and control strategies by focusing on three major areas – the nature of crime, the causes of crime, and the response to crime. It has funded studies and evaluations that are rigorous, scientifically sound, and valuable to criminal justice practitioners – police, prosecutors, judges, correctional officials, and policymakers.

NIJ has recently emphasized the notion of “Translational Criminology” – the translation of scientific discoveries into policy and practice to help prevent, manage, and control crime. It includes: addressing the gaps between scientific discovery and program delivery; finding evidence that something works and figuring out how to implement the evidence in real world practice settings; and knowing what conditions facilitate or inhibit field use of research evidence.

NIJ has also tried to develop an innovative, integrated, cutting-edge research agenda by bringing together the three seemingly disparate sciences the agency supports — the social, forensic and physical sciences.

Also in the past few years, with constrained resources, NIJ has focused on two very important developments: the significant increases in the rate of incarceration; and the soaring crime rate during the 1980s, which was followed by equally large declines during the 1990s and continuing into the new century. The Institute has co-funded with the MacArthur Foundation the creation of a panel at the National Academy of Sciences (NAS) to study the causes of consequences of high rates of incarceration and a series of roundtables to synthesize the research on crime trends.

Other areas of NIJ funding in the past two years include new studies of: California prison realignment; race, crime, and victimization; victim-offender overlap; desistance from crime; police legitimacy; and criminal sanctions. NIJ has continued its work in research programs such as violence against women, teen dating violence, and sexual assault. The goal in all of these efforts is to develop a cumulative body of research knowledge.

NIJ is also deeply committed to funding the most rigorous scientific designs including evaluations using randomized controlled trials (RCT) wherever possible. Right now, NIJ has 17 RCTs in the field. To further strengthen the science, NIJ has initiated Standing Peer Review Panels consistent with practices at other science agencies throughout the federal government. NIJ will also take over Crime Solutions.Gov, a program initiated by former Assistant Attorney General Laurie Robinson when she led the Office of Justice Programs.

One major success story is NIJ's support of the Kennedy School of Government's Executive Session on Policing and Public Safety. Here leading police executives and researchers come together on a regular basis to tackle the major issues facing the field, by focusing on practitioners and finding out the knowledge they need to do their jobs. Currently, there are several papers under production, jointly written by police chiefs and researchers. The sessions also focus attention on how best to "influence the field" through concerted efforts to transform practice and policy. Given the success of this initiative, NIJ will convene a new Harvard Executive Session beginning in 2013 on the future of community corrections policy. The goal is to assemble a panel of expert researchers, practitioners, and others to explore key ideas to help shape the future of policy, practice, and research on issues of offenders supervised in the community.

Data generated by BJS on victims, offenders, law enforcement, prisons and the courts are the basis of many congressional decisions on funding and legislation. We appreciate the Subcommittee's support for the redesign of the National Crime Victimization Survey (NCVS), which has allowed reinstitution of the sample size and interviewer training, and the development of sub-national estimates. It will also allow BJS to fulfill the goal of finding better ways for measuring rape and sexual assault in this self-report survey.

BJS also hopes to embark on NCS-X: The National Crime Statistics Exchange. The first phase of this program is to facilitate the development of a nationally representative sample of U.S. law enforcement agencies that provide detailed information on crime incidents in their communities. It is anticipated that these data will be extracted from local management information systems and assembled at the national level using existing state and national data collection infrastructures.

The agency has also designed and implemented a software system that taps rap sheets housed in state repositories across the nation and yields a researchable database that summarizes the recorded criminal histories of tens of thousands of individuals. The database will support recidivism studies.

Through the modestly-funded State Justice Statistics program, the Statistical Analysis Centers (SACs) conduct research on issues that are essential to both state and federal agencies, such as assessing prescription drug use, human trafficking, and the effects of sex offender policy reform. SACs also have served as the majority of data collection providers for the BJS Arrest-Related Deaths data series. The NRC report urged that BJS expand and strengthen its relationships with the SACs.

Finally, BJS is attempting to upgrade its collection of criminal court processing information to take advantage of the capabilities of modern court management information systems. It has also undertaken efforts to assess the feasibility of building a system of administrative records on white collar crime and an establishment survey of victim services agencies.

These initiatives by NIJ and BJS to help us better understand crime will have difficulty succeeding happen without enhanced resources. We again thank you for the set-aside funds, but more is necessary.

As always, thank you for the opportunity to present our views.

Mr. WOLF. Thank you very much. Thanks for appearing.

Mr. Fattah.

Mr. FATTAH. Thank you generally for your support of the efforts and in particular, you take note of the neuroscience initiative.

And I take note that it was made possible because of the chairman and our counterparts in the Senate's willingness to undertake what I think is going to be a groundbreaking set of recommendations in June.

So thank you.

Mr. SILVER. I agree with you on that.

Mr. WOLF. The next witness will be Julie Stewart with Families Against Mandatory Minimums.

Ms. Stewart, welcome. Your full statement will appear in the record.

THURSDAY, MARCH 21, 2013.

FAMILIES AGAINST MANDATORY MINIMUMS

WITNESS

JULIE STEWART, PRESIDENT

Ms. STEWART. Thank you.

Good morning, Chairman Wolf and Mr. Fattah. My name is Julie Stewart. I am the president of Families Against Mandatory Minimums, a sentencing reform organization.

We are not here to ask for money. I am here to suggest ways that you can save it. Because my time is short, I would ask that you review my written statement for more information about FAMM as well as for our recommendations for back-end reforms to help reduce the Bureau of Prisons' budget that will not jeopardize public safety.

We are especially interested in getting the Bureau of Prisons to increase the number of compassionate releases it grants and we recently co-authored a comprehensive report on that subject that we are happy to make available to you.

While we wholeheartedly support common-sense back-end reforms, we think the best option for Congress is to focus on the front end, that is who is going to prison and for how long. And that is where the real savings are found.

This subcommittee knows why reform is so desperately needed. The Bureau of Prisons' budget and population growth are out of control. We are spending billions locking up too many nonviolent offenders.

The Congressional Research Service recently issued a report that rightly put much of the blame for the BoP growth on mandatory minimum sentencing laws. According to the CRS, they said not only has there been an increase in the number of federal offenses that carry a mandatory minimum penalty, but offenders who are convicted of offenses with mandatory minimums are being sent to prison for longer periods.

Just yesterday in the Senate, Senators Rand Paul and Patrick Leahy introduced the Justice Safety Valve Act of 2013, S. 619. It can help Congress address these problems.

The bill creates a brand new broad safety valve subsection to 18 U.S.C. 3553(g) that would apply to all federal crimes that carry mandatory minimum sentences. It would allow the courts to sentence federal offenders below the mandatory minimum whenever that minimum term does not fulfill the goals of punishment established by Congress in 18 U.S.C. 3553(a).

There are many public benefits of the Justice Safety Valve Act. First, it protects public safety. As one of the former speakers said, this is not a get out of jail free card either. It would not mean that people get off without prison time. It means that they do not get any more prison time than is necessary to keep us safe.

It would also give courts flexibility to punish enough but not too much. It allows the courts to sentence a person below the mandatory minimum if that sentence is too lengthy, unjust, or unreasonable, or does not fit the offender or the crime.

And if you remember in 1986, Congress passed mandatory minimum sentences to target drug kingpins, not the low level offenders that now fill our prisons.

It would also save taxpayer money and focus that money on violent offenders. If a person receives the benefit of the Justice Safety Valve Act and is sentenced to five years in prison, for instance, instead of ten, it would save taxpayers and the Justice Department about \$140,000 in corrections costs.

These savings could be spent on more police or capturing violent criminals or on veterans' courts or terrorists. A broader safety valve is really necessary because the current safety valve only benefits drug offenders and minor priors and gun involvement even for a legally registered firearm that is never used can disqualify a person from it.

A broader safety valve, the likes of which was introduced by Senators Paul and Leahy, would save prison space and money for the truly dangerous while preventing the absurd sentencing results that currently occur under our existing safety valve.

Finally, without a safety valve like the one we are proposing and Senators Paul and Leahy have introduced, our current system has just one safety valve left and that is executive clemency. For whatever reasons, it is not being used either out of bureaucratic misconduct or presidential neglect, but we cannot talk about prison overcrowding and reserving prison space for the most dangerous people when we keep people like Clarence Aaron behind bars. He is serving his natural life in prison for a first-time nonviolent drug offense.

FAMM asks the Members of this subcommittee to support smart sentencing reforms like the Justice Safety Valve Act which, I might add, in concept is supported by Senator Greenleaf from Pennsylvania who you may be familiar with, Mr. Fattah.

We ask you to exercise oversight of DoJ and BoP's budgets, to press the agencies for reforms such as compassion release, increased use of home confinement, and the other recommendations in our written testimony.

And, lastly, we urge you to investigate the Office of the Pardon Attorney.

Thank you.

[The information follows:]

**Statement of Julie Stewart, President,
Families Against Mandatory Minimums
Submitted to the Subcommittee on Commerce, Justice, Science,
and Related Agencies Appropriations
March 21, 2013**

Chairman Wolf, Ranking Member Fattah, and members of the subcommittee, on behalf of the staff, board, and over 25,000 members of Families Against Mandatory Minimums (FAMM), I appreciate the opportunity to submit our views on funding for the Bureau of Prisons (BOP) and Department of Justice (DOJ).

Even before the sequester began, the BOP was under severe budget strain. A January 22, 2013, report from the Congressional Research Service (CRS) provides a useful summary of the extent and causes of the problems.¹ The number of inmates under the BOP's jurisdiction has increased from approximately 25,000 in FY1980 to nearly 219,000 in FY2012. The BOP is currently overcrowded, operating at 38% over its rated capacity; it has been operating at rates of over 25% above its rated capacity since 1998. Last week the Inspector General for the Department of Justice testified that the outlook "is bleak: the BOP projects system-wide crowding to exceed 45 percent over rated capacity through 2018."² Between FY2000 and FY2012, the per capita cost of incarceration for all inmates increased from \$21,603 to \$29,027. Over this same period, appropriations for the BOP increased from \$3.668 billion to \$6.641 billion.

Perhaps the most important number is 25. That is the percentage of DOJ's budget that BOP now consumes. In a letter sent to the U.S. Sentencing Commission last year, Assistant Attorney General Lanny Breuer, the head of DOJ's Criminal Division, argued that federal corrections spending is forcing reductions in federal assistance to states for police, prosecutors, and crime and recidivism prevention programs. He wrote:

In an era of governmental austerity, maximizing public safety can only be achieved by finding a proper balance of outlays that allows, on the one hand, for sufficient numbers of police, investigative agents, prosecutors, and judicial personnel to investigate, apprehend, prosecute, and adjudicate those who commit federal crimes. And, on the other hand, a sentencing policy that achieves public safety correctional goals and justice for victims, the community, and the offender.

Breuer called the current increases in the federal corrections budget "unsustainable" and wrote that current overcrowding in federal prisons "puts correctional officers and inmates alike at greater risk of harm and makes recidivism reduction far more difficult."

¹ CONGRESSIONAL RESEARCH SERVICE, THE FEDERAL PRISON POPULATION BUILDUP: OVERVIEW, POLICY CHANGES, ISSUES, AND OPTIONS 8 (Jan. 22, 2013) [hereinafter CRS Report], *available at* <http://www.fas.org/sgp/crs/misc/R42937.pdf>.

² Statement of Michael E. Horowitz, Inspector General, U.S. Department of Justice, Before the U.S. House of Representatives Committee on Appropriations, Subcommittee on Commerce, Justice and Related Agencies, 9 (March 14, 2013) ("Horowitz Statement").

How did we get into such a mess? The CRS report lists four causes of federal prison population growth:

- 1) Increased numbers of federal offenses subject to mandatory minimum sentences;
- 2) The growth in mandatory minimums has led to increases in sentence ranges - and, therefore, sentence lengths - under the federal sentencing guidelines;
- 3) More crimes have been made into federal offenses; and
- 4) The elimination of parole.

FAMM has been calling for the elimination of mandatory minimum sentencing laws for more than 20 years. These laws do not permit the type of individualized consideration of facts that every American deserves. This one-size-fits-all approach to justice results in many offenders spending much more time in prison than is necessary to protect public safety. Overfull prisons drive the unsustainable growth in federal corrections costs. CRS distills the problem:

Mandatory minimum penalties have contributed to federal prison population growth because they have increased in number, have been applied to more offenses, required longer terms of imprisonment, and are used more frequently than they were 20 years ago. ... Not only has there been an increase in the number of federal offenses that carry a mandatory minimum penalty, but offenders who are convicted of offenses with mandatory minimums are being sent to prison for longer periods. For example, the [U.S. Sentencing Commission or] USSC found that, compared to FY1990 (43.6%), a larger proportion of defendants convicted of offenses that carried a mandatory minimum penalty in FY2010 (55.5%) were convicted of offenses that carried a mandatory minimum penalty of five years or more. While only offenders convicted for an offense carrying a mandatory minimum penalty are subject to those penalties, mandatory minimum penalties have, in effect, increased sentences for other offenders. The USSC has incorporated many mandatory minimum penalties into the sentencing guidelines, which means that penalties for other offense categories under the guidelines had to increase in order to keep a sense of proportionality.³

To cut unnecessary federal spending, Congress should repeal mandatory minimum sentencing laws and allow courts to craft appropriate sentences in every case. Alternatively, Congress could adopt a safety valve proposal similar to the one it passed in 1994 for drug offenses.⁴ A safety valve would allow judges to depart below the mandatory minimum only when the unique facts of a case warrant it.

Another possible response to overcrowding put forward by CRS, which Congress should reject, is to build more federal prisons. The IG decried that solution, telling this subcommittee last week: "In an era where the Department's overall budget is likely to remain flat or decline, it is readily apparent . . . that the Department cannot solve this challenge by spending more money to operate more federal prisons unless it is prepared to make drastic cuts to other important areas of the Department's operations."⁵

³ CRS REPORT at 8.

⁴ See 18 U.S.C. § 3553(f) (2012).

⁵ Horowitz Statement at 9.

The notion that incarcerating more and more people, as opposed to reserving prison space for the truly dangerous and exploring more cost-effective options for others, is dying a long-overdue death. In fact, no one better represents this change in thinking than University of Chicago economist and author Steven D. Levitt. Professor Levitt wrote several influential papers in the early- to mid-2000s concluding that pro-prison policies were a major factor in reducing crime during the 1990s. He later found, however, that as the crime rate continued to drop and the prison population continued to grow, the return on public safety diminished. Dr. Levitt recently told *The New York Times*, “In the mid-1990s I concluded that the social benefits approximately equaled the costs of incarceration.” Today, Dr. Levitt says, “I think we should be shrinking the prison population by at least one-third.”⁶

We agree with the common sense recommendations made by both CRS in its report and by our colleagues in the criminal justice reform community in a letter we jointly sent to members of the House and Senate Appropriations and Judiciary Committees on March 5, 2013. We want to highlight just a few of those today.

First, Congress should lean on the BOP to increase its use of community confinement.

FAMM actively promoted Second Chance Act reforms requiring the BOP to ensure that people leaving federal prison spend up to the final 12 months “under conditions that will afford [them] a reasonable opportunity” to prepare to return to society.⁷ The law allows BOP to provide people with up to one year in a residential re-entry center (RRC, also called a halfway house) and up to the lesser of six months or ten percent of the term of imprisonment in home confinement.⁸

Unfortunately, the BOP is not fully exercising its authority in this area. For example, stays in RRCs in 2010 averaged only 95 days; people released to some combination of RRCs and home detention stayed an average of 4.5 months.⁹ BOP has begun to improve in this area, but we believe that much more needs to be done to ensure that people benefit from the full 12-month reentry period. While the BOP cites high costs and lack of space, a 2012 GAO report points out that the BOP failed to clarify the cost of RRC beds and home detention services and that it provided “no road map” to how to secure this information.¹⁰

We urge you to require the submission of the annual reports obliged by the Second Chance Act on the implementation of community corrections¹¹; to ascertain up-to-date costs and savings possible under the program; to ask the BOP why its use of halfway houses and home detention has been so sparing; and to determine what the BOP might need to implement the Second Chance Act’s directives.

Second, Congress should increase the amount of credit prisoners can earn for good behavior. We support the provision in President Obama’s budget request last year that would

⁶ John Tierney, *For Lesser Crimes, Rethinking Life Behind Bars*, THE N.Y. TIMES, Dec. 12, 2012, available at http://www.nytimes.com/2012/12/12/science/mandatory-prison-sentences-face-growing-skepticism.html?pagewanted=all&_r=0.

⁷ 18 U.S.C. § 3624(c)(1) (2012).

⁸ Second Chance Act of 2007, Pub. L. No. 110-199, § 251 (2008).

⁹ GOVERNMENT ACCOUNTABILITY OFFICE, ELIGIBILITY AND CAPACITY IMPACT USE OF FLEXIBILITIES TO REDUCE INMATES’ TIME IN PRISON 17, Tbl. 2 [hereinafter GAO Report], available at <http://www.gao.gov/assets/590/588284.pdf>.

¹⁰ GAO REPORT at 20.

¹¹ 18 U.S.C. § 3624(c)(5).

adjust the method of calculating good time credits for federal prisoners to add an additional seven days of good time a year and increase the amount of additional good time a prisoner could earn. According to President Obama's budget request last year, and included in the Second Chance Reauthorization Act,¹² making these changes would save taxpayers (and the BOP) \$41 million in the first year alone. We note that a bi-partisan effort to craft language that would allow prisoners to earn additional credit for successful participation in recidivism-reducing programs, such as education or occupational programming, is in the works. FAMM believes this plan is a good idea, and we are working with champions and conferring with members of the House and Senate on a legislative proposal to expand earned good time. If adopted, this type of plan would boost rehabilitation, reduce recidivism, and limit prison overcrowding.

Congress should urge BOP to use its authority to grant "compassionate release." Last December, FAMM and Human Rights Watch published a report titled, "The Answer is No: Too Little Compassionate Release in the US Federal Prisons," a comprehensive examination of this early release program. Congress gave federal courts the authority to grant early release – commonly referred to as "compassionate release" – for "extraordinary and compelling" reasons such as imminent death or serious incapacitation. That authority is being frustrated, however, because the BOP must first bring motions to federal court on behalf of prisoners, something BOP rarely does.

The BOP requires that prisoners be within 12 months of death or profoundly and irrevocably incapacitated to be eligible for compassionate release consideration. Since 1992, the BOP has averaged annually only two dozen motions to the courts for early release, out of a prison population that now exceeds 218,000. The BOP does not even keep records of the number of prisoners who seek compassionate release. Our report includes numerous case studies, including stories of individuals who died in prison even though they posed no threat to public safety. In such instances, taxpayers are forced to pay for expensive end-of-life medical care in addition to the already high incarceration costs.

Moreover, the BOP will not make motions to the courts on non-medical grounds, even though the legislative history of compassionate release reveals that Congress believed that non-medical circumstances could be sufficiently extraordinary and compelling to justify early release. For example, the BOP has not made motions on behalf of prisoners who seek early release to care for dying family members or when the only family member capable of caring for the prisoner's children has died and the children are in danger of entering the foster care system.

Late last month, the BOP announced a minor change that might help to streamline its process of reviewing compassionate release requests approved by wardens. It announced that it was removing its regional directors from that review process. We applaud this minor step, but believe there is so much more that can be done. The BOP should change its procedures to bring compassionate release motions to the court whenever it finds that a prisoner presents "extraordinary and compelling" reasons for release, regardless of whether BOP officials believe early release is warranted. Judges should decide whether early release is warranted. We urge you to use your oversight of the BOP's budget to promote these reforms. In addition, we believe Congress should enact legislation permitting prisoners to file motions seeking early release with

¹² S. 1231, 112th Cong. (2011).

the courts after they have exhausted their administrative remedies at the BOP.

Finally, Mr. Chairman, I would respectfully ask the subcommittee to examine one more area related to federal prisons and the Department of Justice: the Office of the Pardon Attorney (OPA). The OPA receives a small annual appropriation, but there is good reason to believe they are not providing the level of service American taxpayers rightfully expect.

The OPA reviews applications for executive clemency and provides recommendations to the White House based on those applications. A series of investigative reports by Dafna Linzer with ProPublica (in collaboration with *The Washington Post*) revealed racial bias and possible misconduct in the pardon and commutation review process.¹³ Her reporting led to an investigation and finding of wrongdoing by DOJ's Inspector General regarding the OPA's handling of Clarence Aaron's petition for commutation.¹⁴

Aaron is a first-time offender whose crime was arranging a meeting between two drug dealers. Though Aaron was not a dealer, buyer, or supplier, he was held accountable for the all of the drugs sold as a result of his matchmaking. The 24 year-old was sentenced to three life sentences. He has been in prison since 1993. Fortunately, the U.S. Attorney's office that prosecuted Aaron and the judge who sentenced him ultimately agreed that Aaron's sentence should be commuted. President George W. Bush's administration reportedly was interested in granting Aaron's request and sought information from the OPA.

According to the IG, the pardon attorney, Ronald Rodgers, recommended to President Bush that Aaron's request be denied. Rodgers misrepresented the views of the U.S. Attorney's office and judge. The IG report said that Rodger's advice to the president "was colored by his concern ... that the White House might grant Aaron clemency presently and his desire that this not happen." The IG referred the case to Deputy Attorney General James Cole to determine "whether administrative action is appropriate." We are not aware of any further action.

President Obama has granted clemency fewer times than any president in modern history. Because of the OPA's misconduct, we think at least part of the reason might have to do with this taxpayer-funded agency not providing honest services. Over 8,200 applications have been denied or closed administratively since 2009, which raises concerns that the OPA cannot or is not adequately reviewing each application on its current budget. We ask that your subcommittee question the DOJ about the OPA and its plans for making the office more accountable to the president and the American public.

Thank you for this opportunity to present our views.

¹³ The stories are collected in *Presidential Pardons, Shades of Mercy*, available at <http://www.propublica.org/series/presidential-pardons>.

¹⁴ U.S. DEP'T OF JUSTICE, OFFICE OF THE INSPECTOR GENERAL, OVERSIGHT AND REVIEW DIVISION, A REVIEW OF THE PARDON ATTORNEY'S RECONSIDERATION OF CLARENCE AARON'S PETITION FOR CLEMENCY (Dec. 2012), available at: <http://www.justice.gov/oig/reports/2012/s1212.pdf>.

Mr. WOLF. Thank you very much.

Mr. Fattah and I are going to be putting in a bill sometime later in the middle of the year to set up a national commission to look at all of these things.

But, Mr. Fattah.

Mr. FATTAH. And we did have the IG do an investigation of the Pardon Office and he testified just last week or the week before. It is hard to keep track of all of our hearings. The chairman works us so hard.

But we are on this, and thank you very much for your testimony.

Ms. STEWART. I hope you will keep their feet to the fire.

Mr. FATTAH. We will.

Ms. STEWART. Thank you.

Mr. WOLF. Thank you.

The next witness, Mr. Donald Kennedy, Regional Information Sharing Systems National Policy Group.

I have no questions.

Mr. Fattah.

Mr. FATTAH. No.

Mr. KENNEDY. Good morning.

Mr. WOLF. Go ahead. Good morning.

THURSDAY, MARCH 21, 2013.

REGIONAL INFORMATION SHARING SYSTEMS NATIONAL POLICY GROUP

WITNESS

DONALD F. KENNEDY, JR., CHAIR

Mr. KENNEDY. Chairman Wolf, Ranking Member Fattah, thank you. I appreciate the opportunity to appear before you to discuss the Regional Information Sharing System or the RISS program.

RISS, as you know, is a proven, trusted, innovative, evidence-based program that helps thousands of criminal justice agencies save lives, solve crimes, and prosecute offenders.

RISS has served our Nation for over 40 years providing secure information, intelligence capabilities, investigative and analysis and officer safety deconfliction.

Demands for RISS services has grown throughout the years. However, in fiscal year 2012, RISS funding was reduced by 40 percent. RISS lost hundreds of years of expertise due to staff layoffs. This resulted in decreases in information sharing efforts, analytical services, investigative case support, training, and support for national programs.

A Philadelphia police captain recently said RISS is our single most important intelligence partner. RISS is one of our best and greatest allies in our ongoing initiative to disrupt and dismember organized criminal enterprises.

It is critical that RISS receive appropriate funding. It is respectfully requested that RISS in 2014 funding be restored to its fiscal year 2011 level of \$45 million.

If you recall last year on May 8th, Congressman Grimm along with Representative King and Barletta successfully amended the

House CJS Appropriations Act with language that fully funded RISS back at \$45 million. This action illustrates the House's continued commitment in support of the RISS program.

RISS services over 9,000 criminal justice agencies which represents more than 892,000 officers. RISS operates RISSNET, the only nationwide secure but unclassified law enforcement information sharing provider that is governed by its users.

Agencies can easily connect to RISSNET, share information and intelligence in a secure environment, and query multiple systems simultaneously by a federated search.

By connecting to RISSNET, rather than funding the build-out of a new stand-alone system, hundreds of millions of dollars are saved and millions of data records are easily and quickly accessible by law enforcement.

RISS also partners with a number of federal agencies and programs such as the Office of the Program Manager Information Sharing Environment, PM-ISE office, United States Attorneys' offices, the United States Department of State and diplomatic security officers, as well as Secret Service, Medicaid fraud control units, and the National Motor Vehicle Title Information System.

RISSNET is one of four SBU networks currently providing assistance with the assured SBU interoperability initiative under the auspices of the White House and the PMIC's office.

RISS supports the national suspicious activity reporting initiative as well as National Fusion Center efforts by connecting their systems to RISSNET.

In December 2012, RISS was mentioned by the White House and the national strategy for information sharing and safeguarding.

In 2008, RISS deployed RISSafe, the only comprehensive, nationwide office of safety and deconfliction system that is accessible 24/7, 365 days of the year and is available to all law enforcement. Since its inception, RISSafe has had more than 615,000 operations and over 208 conflicts have been identified.

Twenty-three RISSafe offices are currently operational, 17 of which are other organizations other than RISS such as the Pennsylvania State Police, West Texas HIDTA, and San Diego.

In 2012, RISS introduced RISS Mobile which allows officers to access RISSafe using smartphone technology.

Over the last ten years, officers leveraging RISS have resulted in more than 48,000 offenders being arrested and more than \$662 million in narcotics, property, and currency being seized.

RISS is an excellent return on investment for our Nation. I understand the tough fiscal issues that we are facing in our country today, but for return on investment, we would challenge anyone to match the value RISS provides to public safety nationwide.

On behalf of RISS, I appreciate the opportunity to speak with you before the committee and thank you for your support.

[The information follows:]

Regional Information Sharing Systems (RISS) Program
A Proven Resource for Law Enforcement

Fiscal Year 2014 Testimony to the Subcommittee on Commerce, Justice, Science, and Related
 Agencies of the Committee on Appropriations, United States House of Representatives

Submitted by Donald F. Kennedy, Jr., Chair, RISS National Policy Group

The **Regional Information Sharing Systems (RISS) Program** helps thousands of criminal justice agencies save lives, solve crimes, and prosecute offenders. RISS has served the nation for almost 40 years, providing secure information and intelligence sharing capabilities, investigative and analytical services, and officer safety deconfliction. During these difficult fiscal times, law enforcement agencies have experienced reductions in funding and manpower. Agencies turn to and rely on RISS for its resources and support. In FY2012, **RISS's funding was reduced 40 percent**, exacerbating an already critical situation. Meanwhile, **the demand for RISS's services continued to increase**. "RISS is one of the most cost-effective resources out there." "RISS is like an extra officer in our department." "RISS—The most important working tool for law enforcement to combat criminal activity and terrorism." These statements are examples of what officers are saying about RISS. It is critical that RISS receive appropriate funding to continue its support for these officers and our criminal justice community. It is respectfully requested that you **restore RISS's FY2013 and FY2014 funding to its FY2011 level of \$45 million**.

Although a number of RISS's services were reduced or eliminated in FY2012, RISS strived to maintain its critical services and resources, such as the RISS Secure Intranet (RISSNET), the RISS Criminal Intelligence Databases (RISSIntel), analytical services, and the RISS Officer Safety Event Deconfliction System (RISSafe). Without restored funding, RISS's ability to provide these services, support the growing needs of law enforcement, and respond to the increased demand for services will diminish, ultimately impacting law enforcement efforts to solve crimes and safeguard communities.

RISS consists of six regional centers and the RISS Technology Support Center. The centers tailor their services to meet the needs of their unique regions while working together on nationwide issues. RISS is a proven, innovative, cost-effective, and evidence-based program that is used and trusted by thousands of local, state, federal, and tribal criminal justice agencies. RISS serves hundreds of thousands of officers and public safety professionals in all 50 states, the District of Columbia, U.S. territories, Australia, Canada, England, and New Zealand. According to a sheriff in Nebraska, "RISS provides resources that we could not otherwise afford, such as equipment and information sharing services. RISS resources help our agency operate more efficiently, and without them, we would not be where we are today."

RISS Provides Secure Information, Investigative, and Intelligence Sharing Capabilities

Historically, law enforcement and criminal justice agencies encountered obstacles related to information sharing, communications, and technology. Many agencies individually held pieces of information about criminals and their activities but lacked a mechanism to securely collect and exchange information. Consequently, the law enforcement community's response to criminal activity was often duplicative and limited. In 1997, RISS developed **RISSNET**, a secure

infrastructure for law enforcement and criminal justice agencies to share information across jurisdictions. **RISSNET is the only nationwide Sensitive But Unclassified (SBU) law enforcement information sharing cloud provider governed by its users.**

RISSNET houses millions of pieces of data, offers bidirectional sharing of information, and connects disparate state, local, and federal systems. Agencies can easily connect to RISSNET, share information and intelligence in a secure environment, and query multiple systems simultaneously. Our nation's public safety mission requires an interoperable information sharing environment to proactively solve crimes. RISSNET is a major component in meeting this need.

RISSNET also serves as the secure communications infrastructure for a number of critical resources and investigative tools. Currently, **86 systems are connected or pending connection** to RISSNET. There are more than **350** RISS and partner resources available via RISSNET to authorized users; the owners of these resources rely on RISSNET for its secure infrastructure. By connecting agencies and systems to RISSNET, rather than funding the build-out of new stand-alone information systems, hundreds of millions of dollars are saved and millions of data records are easily and quickly accessible by law enforcement. A Pennsylvania police officer said, "Connectivity to RISSNET is absolutely critical to solving multijurisdictional crimes."

Examples of RISS-developed resources accessible via RISSNET include RISSIntel, RISSafe, the RISS Officer Safety Website, the RISS National Gang Program (RISSGang), the RISS Automated Trusted Information Exchange (ATIX), RISSLeads, the RISSLinks data-visualization and link-analysis tool, the RISS Center websites, and secure e-mail.

RISSIntel—The RISSIntel user interface provides for **real-time, online federated search of 34 RISS and partner intelligence databases**, including state systems, the California gang intelligence system (CalGang), and systems connected via the National Virtual Pointer System (NVPS), and does not require the RISSNET user to have a separate user account with the respective partner systems. This simplified sign-on approach enables officers to save time and quickly retrieve critical information. In FY2012, RISSIntel contained almost **2.8 million** intelligence records (not including the multitude of records available through connected partner systems), and users made more than **4.7 million** inquiries in RISSIntel.

RISSGang—The RISSGang Program is the only comprehensive gang resource that offers a criminal intelligence database, informational resources, and a secure bulletin board. The RISSGang criminal intelligence database provides law enforcement agencies with access to gang information, including suspects, organizations, weapons, photographs, and graffiti. RISS has connected and continues to connect gang systems. For example, in FY2011, RISS completed a system-to-system interface between RISSIntel/RISSGang and CalGang, enabling authorized users to initiate a federated search. In addition, in FY2012, RISS completed the connection of the Bureau of Alcohol, Tobacco, Firearms and Explosives' GangNET.

RISS ATIX—After September 11, 2001, the public safety community voiced concerns regarding their limited ability to securely communicate and share information with law enforcement and other critical infrastructure entities. In FY2002, RISS developed RISS ATIX, which provides a secure platform for law enforcement, public safety, and private sector entities

to share disaster, terrorism, and other information. RISS ATIX supports more than **200,000** public safety professionals and consists of more than **40** community groups. RISS ATIX resources include secure web pages, a discussion forum, a document library, and secure e-mail.

Each RISS Center maintains a secure website to provide users with easy access to RISSIntel, other RISSNET resources, and other resources, such as the Cold Case Locator and the RISS Pawnshop Database. The number of investigative records available through these different systems exceeds **28 million**.

RISS's Nationwide Impact

RISS's unique structure helps meet the needs of local, state, and tribal law enforcement while partnering with federal agencies on a number of nationwide initiatives. For example, RISS is the only nonfederal entity participating in the **Assured SBU Interoperability Initiative** under the auspices of the White House and the Office of the Program Manager, Information Sharing Environment (PM-ISE). This initiative seeks to expand federated access to resources and to provide simplified sign-on capabilities for officers to access multiple systems simultaneously. RISS is at the forefront in providing simplified, federated access. More than **10,000 users** from trusted partner systems are using Federated Identity to access RISSNET resources, including the Federal Bureau of Investigation's (FBI) Law Enforcement Online, the Chicago Police Department, and the Pennsylvania Justice Network.

RISS currently supports **1,072** federal member agencies. Examples of RISS's partnerships with federal agencies and programs include the FBI National Gang Intelligence Center, the PM-ISE, the United States Attorneys' Offices, the U.S. Department of State, the Diplomatic Security Offices, the United States Secret Service's Targeted Violence Information Sharing System, the U.S. Postal Inspection Service, the National Center for Missing & Exploited Children, and the National Motor Vehicle Title Information System. RISS also supports the **Nationwide Suspicious Activity Reporting Initiative** by connecting systems to RISSNET and hosting individual state servers. RISS built and hosts the NVPS Message Hub to provide access to the NVPS participant agencies and to RISS member agencies that submit records to the RISSIntel databases via RISSNET. There are **10 databases** connected through NVPS. RISS continues to connect **fusion centers** to RISSNET, integrate RISS services and tools into fusion center operations, and provide training opportunities. Most recently, RISS was mentioned in the *National Strategy for Information Sharing and Safeguarding*, released by the White House in December 2012. RISS and the other entities listed in the report have made significant strides in leveraging partnerships and technology to enhance the information sharing environment.

RISS continuously seeks and is sought out by others to enable new information sharing partnerships that leverage its secure SBU information sharing capabilities. For example, in FY2012, RISS deployed and provided users with access to the **Federal Law Enforcement Training Center** Electronic Learning Portal. In addition, several state **Medicaid Fraud Control Units** are using RISSNET to securely share information, lessons learned, and other information to help in their detection and prosecution efforts. More than 26 secure collaboration sites are housed on RISSNET for partnering organizations.

RISS is supported by many law enforcement organizations, including the International Association of Chiefs of Police, the National Sheriffs' Association, the National Narcotic Officers' Associations' Coalition, and the National Alliance of Gang Investigators Associations. RISS's partnerships have resulted in an unprecedented level of information and intelligence sharing.

RISS Enhances Officer Safety Through Deconfliction

More than 19,000 law enforcement officers have died serving our nation. At the current rate, one officer is killed every 53 hours in the United States. Officer safety is of paramount importance to the law enforcement community and the citizens they serve. The RISS policy boards recognized this critical need and voiced the need for a nationwide deconfliction system.

RISSafe is an essential component in helping ensure officer safety. RISSafe stores and maintains data on planned law enforcement events and identifies and alerts affected agencies and officers of potential conflicts impacting law enforcement efforts. Since RISSafe's inception in 2008, more than **615,000 operations** have been entered, resulting in more than **208,000 identified conflicts**. Currently, **23 RISSafe Watch Centers** are operational, 17 of which are operated by organizations other than RISS, such as state agencies, fusion centers, and High Intensity Drug Trafficking Areas (HIDTA). These organizations have invested resources to support this critical nationwide officer safety program. The interaction between RISSafe and RISSIntel provides comprehensive officer safety event and subject deconfliction services. Many agencies have adopted internal policies mandating the use of RISSafe. In FY2012, RISS introduced **RISSafe Mobile**, which enables officers to access RISSafe from their smartphones and other mobile devices.

RISSafe is the only comprehensive and nationwide deconfliction system that is accessible and monitored on a 24/7/365 basis and available at no cost to all law enforcement agencies regardless of RISS membership. RISSafe continues to proliferate throughout the country, with demand for its use increasing each day. **It is impossible to put a cost to the number of officers RISSafe has already prevented from harm or, worse, death.** A Washington police officer said, "RISS services are the basis of our department's information and intelligence-led policing efforts and also provide the critical deconfliction component vital to the safety of our officers in the field."

There are many websites containing officer safety-related information; however, in some cases, the information is outdated, inaccurate, or actually intended to harm officers. RISS's member agencies expressed an interest in accessing one location to obtain reliable and accurate officer safety information. RISS launched the **RISS Officer Safety Website**, which serves as a nationwide repository for issues related to officer safety, such as concealments, armed and dangerous threats, officer safety videos, special reports, and training.

RISS Provides Critical and Diverse Investigative Support

Many law enforcement agencies still do not have the support, resources, and/or funding to obtain analytical services, purchase investigative and surveillance equipment, send officers and personnel to training, research volumes of data, and develop intelligence briefings and other law

enforcement-sensitive documents. RISS member agencies rely on RISS for these and many other investigative support services. RISS offers full-service delivery, from the beginning of an investigation to the ultimate prosecution and conviction of criminals. A North Carolina sheriff said, “RISS represents a ‘one-stop shop’ of resources for today’s law enforcement agencies—whether the need is for criminal intelligence, technical support, or training resources. RISS offers a fantastic solution to the budgetary dilemma facing local agencies.”

Using RISS’s resources and services enables officers to—

- Simultaneously query connected intelligence databases via RISSNET.
- Retrieve information from specialized and investigative databases and resources.
- Use analytical products such as crime scene diagrams, link-analysis charts, digital forensics, and audio/video services to aid in arresting and prosecuting offenders.
- Request assistance from research staff to help sift through information, conduct research, and help identify the missing piece of the puzzle.
- Borrow specialized surveillance and investigative equipment, such as global positioning systems, customized cameras, and recording devices.
- Obtain training on new and emerging topics, such as social media, domestic terrorism organizations, and border and immigration.
- Access critical publications and law enforcement-sensitive briefings, including topics such as sovereign citizens, gun violence, narcotics, and human trafficking.

In FY2012, the RISS Centers developed **32,657** analytical products, loaned **4,597** pieces of specialized equipment, responded to **184,553** requests for research assistance, and trained **53,308** individuals. **RISS is an excellent return on investment for our nation.** Over the last 10 years, officers leveraging RISS’s services arrested more than **48,000** offenders and seized more than **\$662.3 million** in narcotics, property, and currency. As a cost-effective program, RISS benefits thousands of agencies and helps supplement their needs without compromising shrinking budgets or the support necessary to keep their communities safe. Every day, officers use RISS to help solve cases and stay safe. Statistics are only one way to see the value of RISS; the real successes come directly from agencies and officers. To view success stories from your region or state as well as other information regarding RISS, please visit www.riss.net/Impact.

It is respectfully requested that Congress restore FY2013 and FY2014 funding for RISS to the FY2011 amount of \$45 million so that this essential information sharing and public safety program can continue to serve our nation. Inadequate funding and support for RISS could diminish the nation’s information sharing environment, hinder investigations, and impact the safety of our communities. It would be counterproductive to require local and state RISS members to self-fund match requirements, as well as to reduce the amount of Bureau of Justice Assistance discretionary funding. Agencies require more, not less, funding to fight the nation’s crime problem. RISS is unable to make up the decrease in funding that a match would cause, and it has no revenue source of its own. RISS is dedicated to providing quality services, fostering interagency cooperation, and creating strong partnerships. RISS is a *Proven Resource for Law Enforcement*. Its services increase the ability to detect, prevent, identify, solve, and prosecute crime while creating a safer working environment for our nation’s law enforcement. RISS is grateful to provide this testimony and appreciates the support this committee continuously provides to the RISS Program.

Mr. WOLF. Thank you, Mr. Kennedy.

I know it is a good program and I support it.

Mr. Fattah.

Mr. FATTAH. I agree with the chairman. Thank you for your service.

Mr. KENNEDY. Thank you very much, gentlemen.

Mr. WOLF. Next is Scott Came with SEARCH, executive director.

THURSDAY, MARCH 21, 2013.

SEARCH

WITNESS

SCOTT CAME, EXECUTIVE DIRECTOR

Mr. CAME. Good morning, Mr. Chairman, Ranking Member Fattah, and Members of the committee.

I am Scott Came, the executive director of SEARCH. I am pleased to be with you here today to address Department of Justice funding for the fiscal year 2014 appropriations bill, specifically for two critical programs that can help make the Nation safer, the NICS Act Record Improvement program or NARIP and the National Criminal History Improvement program, NCHIP.

SEARCH's government appointed members have the responsibility among other things to oversee the implementation of NARIP and NCHIP within their states.

Over the years, states have made great strides in meeting their criminal history record improvement goals under both programs despite severely limited funding levels for each. However, there is a great deal of work that remains to be done.

In light of recent tragic events due to gun violence and the simultaneous demand for accurate, complete, and timely criminal history records for key decisions, there should be a priority placed on NARIP and NCHIP funding.

Both NARIP and NCHIP focus on improvements to the accuracy of the criminal history record which in turn improves officer safety, allows judges to make more informed decisions, and helps authorized non-criminal justice users to make better decisions about volunteers who work with our vulnerable populations and, of course, those who wish to purchase firearms.

And while complementary, each of these programs has specific and distinct goals. NARIP primarily focuses on enhancing decision making for firearms purchases such as increasing the number of disqualifying mental health records available to the system. NCHIP is focused on a broader range of criminal history improvements such as improving arrest and disposition matching.

It is important to note that under current law, only 20 states qualify for NARIP funding. Thus, the majority of the states rely on NCHIP for criminal history record and repository improvements.

As such, SEARCH makes two key recommendations to the subcommittee. First, invest in background screening for firearms purchases. As you know, the vast majority of records used to make firearms transfer determinations are records maintained and made available by the states.

Many states have made their records available to NICS despite a lack of sufficient funding to help build this infrastructure, but there is still a vast number of records missing from NICS and that situation needs to be remedied.

The need for additional NARIP funding is not dependent on an expansion of the background checking system. It is to improve the system's effectiveness for existing requirements related to background screening for firearms purchases.

For example, in New York, NARIP funding has enabled the State to form a multi-agency task force that focuses on the strategic oversight and governance of NICS data collection and submission improvements. To date, New York has submitted in excess of 165,000 records to the NICS index due to this program.

In Florida, the Department of Law Enforcement is working with the clerks of court to retrieve historical mental health records to better ensure those adjudicated mentally defective are denied firearms purchases.

With a meaningful investment of \$50 million for NARIP in fiscal year 2014, we hope other states will follow these examples and help contribute to an effective national background screening system for firearms purchases.

Our second recommendation to the subcommittee is to enhance criminal history records with funding for NCHIP. Unlike NARIP, all states qualify for NCHIP funding. As such, \$25 million in NCHIP funding will ensure all states can access funds to enhance and contribute their criminal history records to the national systems.

Georgia, for example, does not qualify for funding under NARIP. However, the State has actively used NCHIP to improve the quality of the State's criminal history information.

Mr. Chairman, in your home State of Virginia with the NCHIP funding, the state police established electronic access to criminal history records on-site at gun shows preventing the transfer of firearms to prohibited persons.

Mr. Chairman, we recognize the great financial challenges facing our Nation and the Congress. And we thank the subcommittee for its support over the years despite these challenges. However, the need for meaningful investment in our public safety decision-making infrastructure has never been more critical.

On behalf of SEARCH and its governors' appointees, I thank you for your time.

[The information follows:]

SEARCH*The National Consortium for Justice Information and Statistics*

Francis X. Aumand III
Chairman



Scott M. Came
Executive Director

Prepared Testimony of Scott Came, SEARCH Executive Director
March 21, 2013

Introduction

I am Scott Came, Executive Director of SEARCH, The National Consortium for Justice Information and Statistics. Thank you, Mr. Chairman and members of the Subcommittee, for the opportunity to speak to you today on the Department of Justice (DOJ) funding to be provided for in the FY14 Commerce, Justice, Science, and Related Agencies appropriations bill. SEARCH recommends that the National Instant Criminal Background Check System (NICS) Act Record Improvement Program (NARIP) receive an appropriation of \$50 million, and the National Criminal History Improvement Program (NCHIP) receive an appropriation of \$25 million.

SEARCH, The National Consortium for Justice Information and Statistics (SEARCH), is a nonprofit membership organization created by and for the states. SEARCH's Governor-appointed, dues-paying Members from each of the 50 states and territories have the responsibility, among other things, to oversee both NARIP and NCHIP within their states.

Over the years, states have made great strides in meeting their criminal history record improvement goals under both programs, despite severely limited funding levels for each program. SEARCH recognizes that these are difficult budgetary times that have strained investments in criminal history improvement over the past several years.

There is still work to be done to realize a truly complete and accurate national criminal history background check system. That system informs a variety of critical public safety decisions, as well as noncriminal justice decisions, such as those regarding applicants for employment and licensing, to volunteers who work with children and other vulnerable populations, to individuals purchasing firearms. In light of recent, tragic events due to gun violence, and the simultaneous demand for accurate, complete and timely criminal records for a range of decisions, there should be a priority placed on NARIP and NCHIP funding.

It is important to note that both NARIP and NCHIP each focus on improvements to the efficiency, effectiveness, timeliness and accuracy of criminal history record and associated data for decisionmaking purposes. However, each program emphasizes specific and distinct goals, while also complementing one another. NARIP funding has been heavily focused on enhancing decisionmaking for firearms purchases, such as increasing the number of disqualifying mental health records available to the system. NCHIP is focused on a broader range of criminal history improvements that individual states have prioritized (improving arrest and disposition matching, increasing conviction record availability in the federal systems, etc.). Perhaps most significantly,

by current law, only 20 states qualify for NARIP funding to improve their contributions to NICS¹. Thus, the majority of the states rely on NCHIP for criminal history record and repository improvements related to all criminal and non-criminal justice decisionmaking. As such, SEARCH makes two key recommendations:

1. Invest in Background Screening for Firearms Purchases

Since the recent tragedies in Aurora, Colorado, and Newtown, Connecticut — compounded by the nearly daily reports of gun-related violence — significant focus has been placed on the nation's background screening system for firearms purchases: NICS. Some of that focus has been mistakenly critical of the states and their contributions to the databases used for such screening. Indeed, the vast majority of records used to make firearms transfer determinations are records maintained and made available by the states. Thus, the overwhelming majority of firearms transfer denials are based on state records. States have made their records available despite facing many extraordinary, and well-documented, obstacles to effectively sharing information at the national level and in support of this national system.

Those obstacles include lack of sufficient investment to help build the infrastructure for electronic information sharing, continuing challenges with making disqualifying records (such as felony convictions) available to NICS, and significant policy challenges (particularly with sharing mental health records). NICS has been very successful in denying the sale and transfer of guns to those prohibited from having them. The States and FBI rely on NICS for robust decision-making on daily firearms transactions. There are, however, opportunities for improving the timeliness and availability of information to NICS that could be addressed by targeted funding. For example, there are still millions of records related to felony convictions, under indictment/information, fugitive from justice and drug abuser prohibiting categories that are not always available to NICS.

A lack of sufficient funding to the states, exacerbated by impractical grant requirements, has been one of the most significant challenges to creating a more robust background check system for firearms purchases. Despite an authorization of \$1.25 billion for FY 2009–2013, congressional appropriations for the NARIP have been a small fraction of that authorization (\$20 million, \$17 million, and \$5 million in FY 10-12, respectively). Meanwhile, the U.S. Department of Justice's Bureau of Justice Statistics (BJS) — which administers the grant program — received grant applications requesting funding far above the amounts appropriated. Ironically, however, due to the grant program's requirements, most states could not qualify to receive funding. As a result, only three states received funding in FY 2009 for a total of \$2.5 million — despite the fact that 22 states applied for \$13.5 million in funding. In FY 2010, eight states received \$16.9 million, although 15 states submitted applications totaling \$28 million. In FY 2011, 15 states applied for more than \$33 million in funding; however, 12 states received just over \$20 million. FY 2012 grantees received just over \$11 million in funding.

¹ NARIP has two main requirements: States must 1) establish a process where those adjudicated as "mentally defective" can seek to reinstate their right to purchase a firearm, and 2) comply with a process to estimate the number of NICS disqualifying records they maintain. Only 20 states have met requirement #1.

The need for additional funding is not dependent on the expansion of the background checking system; it is to improve the system's effectiveness for existing requirements related to background screening for firearms purchases.

For example, in New York, NARIP funding has enabled the state to form a multi-agency task force that focuses on the strategic oversight and governance of NICS data collection and submission improvements. The state has deployed the NICS Transmission System that agencies use to submit mental health, civil guardianship and orders of protection records, and to date, New York has submitted in excess of 165,000 records to the NICS Index.

NARIP funding also allowed New York to collect and report Misdemeanor Crimes of Domestic Violence (MCDV) convictions via criminal histories and submit them to NICS. In addition, the state repository continues to work with the courts in identifying system and database errors that contribute to unresolved arrest events, expected to eliminate an estimated 10,000 disposition errors per month.

In Florida, NARIP funding has been instrumental in improving the Florida Department of Law Enforcement (FDLE) Firearm Purchase Program (FPP), the state's contact to NICS. With NARIP funding, FDLE developed the online Firearm Eligibility System, which now processes 50% of firearm purchase background checks. Additionally, FDLE is working with the Clerks of Court to retrieve historical mental health records to better ensure those adjudicated mentally defective are denied firearm purchases. So far, more than 39,000 records prior to 2007 have been entered, including more than 1,600 records from Hillsborough County.

SEARCH urges the Committee to make a meaningful investment in building our nation's capabilities to effectively conduct background screening for firearms purchases. For that investment to be successful, it should also remove the roadblocks to successful state participation and develop strategies to improve the availability of disqualifying records to the NICS Index. With a \$50 million investment in NICS via NARIP in FY 2014, states that qualify for the funding will be able to concentrate on criminal history record priorities that would allow them to increase their record contributions to NICS.

It is also critical that decisionmakers ensure all states receive or are eligible for grant funding to support improvements to NICS — based on incentives, not penalties — and that new funding is authorized and appropriated for this work. It is likely that many states will not meet the “relief from disabilities” requirement attached to NARIP funding. While SEARCH does not have a policy position on this requirement, to disqualify states from funding to improve their criminal history record system only weakens the potential for a national system that provides the most complete, accurate, and timely records to inform critical decision-making. The fact that more than half of the states do not qualify for NARIP makes NCHIP that much more important.

2. Enhancing Criminal History Records with Funding for NCHIP

The NCHIP program has been successful in helping states to improve the accuracy, reliability and completeness of their automated, criminal history record systems. Unlike the NARIP, all states qualify for funding under NCHIP to improve their criminal history record systems. States who cannot qualify for NICS funding will be significantly hampered in their efforts to help improve the nation's criminal history record system if they cannot access sufficient resources via NCHIP.

Georgia, for example, does not qualify for NICS funding under the NARIP program. However, Georgia has actively used NCHIP to improve the quality, completeness and accessibility of criminal history information available to criminal justice agencies. NCHIP funding helps Georgia ensure that the most current criminal history data is available and accessible for criminal justice needs, as well as to the general public where applicable.

In Virginia, via NCHIP funding, the State Police can now provide electronic access to criminal history records on-site at gun shows. This ensures rapid response to the National Instant Criminal Background Check System (NICS) and prevents the transfer of firearms to prohibited persons.

NCHIP's broad objective is to enhance the criminal justice capabilities of state governments by improving the accuracy, completeness and timeliness of criminal history records. These state systems support federal records systems, including the Federal Bureau of Investigation (FBI) Interstate Identification Index (III).² Indeed, seventy percent (70%) of all III records are maintained by the states and thirty percent (30%) are maintained by the FBI.³

NCHIP funds have also furthered efforts in Virginia to improve the completeness and accuracy of Computerized Criminal History files and the Court Automated Information System and the state has reached a completion rate for missing dispositions of approximately ninety-five percent (95%). Similarly, in New York, NCHIP funds have supported major initiatives to modernize and vastly improve the ability to provide critical information services to New York's state and local criminal justice agencies. The state repository and the courts collaborate to identify system and database problems that contribute to unresolved arrest events. As a result of these efforts – and similar to Virginia – New York has one of the best completion rates in the nation for missing dispositions (greater than 92%).

Since 1995, Florida's criminal justice community has used both NCHIP and NICS funds to make many major improvements in the collection and sharing of information in support of public safety. Recent projects such as automating court disposition reporting in all Florida counties, as well as researching and reporting historical disposition data have resulted in the addition of over 700,000 new dispositions and updates to over 2.5 million dispositions.

BJS, with limited funding, has been widely recognized for its extraordinary efficiency, effectiveness and accomplishments in the NCHIP program. The last two Government Accountability Office (GAO) reports on NCHIP (in 2004 and 2008) highlighted the program's continued success in meeting its goals and the significant progress states made toward automating state criminal history records and making them accessible nationally.⁴ Indeed, the states have devoted massive efforts and resources over many years toward building automated, criminal history record databases that are accurate, complete and reliable. Notwithstanding the efforts of BJS and the states, there continue to be significant shortfalls in arrest reporting; in disposition reporting; and in accuracy and data quality.

² The Interstate Identification Index is the national system designed to provide automated criminal history record information of federal offenders and records of offenders submitted by all states and territories.

³ Survey of State Criminal History Information Systems 2010, Bureau of Justice Statistics, U.S. Department of Justice, Office of Justice Programs (November 2011) (<https://www.ncjrs.gov/pdffiles1/bjs/grants/237253.pdf>)

⁴ See GAO reports (<http://www.gao.gov/new.items/d04364.pdf>; <http://www.gao.gov/new.items/d08898r.pdf>).

NCHIP has suffered over the past several years due to considerably reduced funding. In FY 2010 congressional appropriations were approximately \$12 million for this program, dropping to \$10 million in FY 2011, and to \$6 million in 2012. In fact, the program has been so significantly underfunded that some states no longer receive any allocation from the NCHIP grants. Because state criminal history records are the primary source for the FBI III database, any constraints on the states weakens the ability of many federal programs to identify threats and keep our nation safe.

Today, the accuracy, completeness and reliability of the nation's criminal history record system is more important than ever before, for law enforcement investigations; officer safety; sentencing and other criminal justice purposes; for expungement and other reentry strategies; for homeland security and anti-terrorism purposes; for public non-criminal justice purposes, such as security clearances and employment suitability; and for research and statistical programs that provide critical guidance for justice assistance decisions and for shaping law and policy. Without an adequate level of funding for the states, the quality of criminal records available nationwide will continue to be negatively impacted.

As you can see from the examples above, for both of NICS and NCHIP, SEARCH encourages Congress to allow states to use funding at their discretion to address the specific challenges each state faces in making more records available to the national system. Funding should also encourage adherence to performance metrics and accountability measures. SEARCH supports that Congress should expect, and states should define, specific and measurable goals for which they will use the funding to demonstrate progress and impact. Meanwhile, states should receive incentives, rather than penalties, to facilitate their compliance with grant requirements. SEARCH also encourages Congress to fund technical assistance and technology investments for states to improve automated information sharing systems in support of NICS.

Conclusion

SEARCH thanks the Chairman and members of the Subcommittee for their steadfast support of these programs in the face of daunting budget challenges. Given the reliance on criminal history record systems for critical decisions that keep our citizens safe from guns, predators, terrorists and other criminals, it is a worthwhile and needed investment.

We urge Congress to make a substantial investment in the Federal-State criminal background screening partnership that comprises NICS. NICS is a critical tool in the fight against gun violence, but funding for its improvement must envision a national scope that is inclusive of all the states. As Florida representatives noted, their successes with information sharing would not have been possible without the support of NARIP and NCHIP funding.

Meaningful NCHIP funding will more broadly improve this nation's criminal justice information sharing backbone. And the federal investment can be leveraged many times over by contributing to the ability of state and local criminal justice agencies to provide timely, accurate and compatible information to federal programs such as III.

On behalf of SEARCH, its governors' appointees, and the thousands of criminal justice officials who participate in the SEARCH network and who benefit from SEARCH's efforts, I thank you for your time. It has been a pleasure appearing here today.

Mr. WOLF. Thank you, Mr. Came. I appreciate it.

Mr. Fattah.

Mr. FATTAH. Thank you for your testimony.

Mr. KENNEDY. Thank you.

Mr. WOLF. Next is Henry Cagey, Lummi Indian Business Council.

Mr. Cagey, your full statement will appear in the record.

THURSDAY, MARCH 21, 2013.

LUMMI INDIAN BUSINESS COUNCIL

WITNESS

HENRY CAGEY, COUNCIL MEMBER

Mr. CAGEY. Thank you.

Again, Mr. Chairman, my name is Henry Cagey. I am the former chairman of the Lummi Nation and also the council member for the Lummi Indian Business Council.

You know, the Lummi Nation is located in the northwest corner of Washington State. You know, we have over 5,000 members. We are signatories to the Point Elliott Treaty and we come here today to talk about some of the things that we have seen the committee do for us.

The last time I was here, we were asking for support for our fishermen with the Department of Commerce on the salmon disaster. We did get help, so thank you very much, Mr. Chairman, for all the help you have done for our people.

You know, we want to bring to your attention some of our directives for the committee and some of the things that we are facing with the Lummi Nation is incarceration. Incarceration, as you know, is still challenging for Indian people across the board.

One of the things that we are doing for the tribe is that we are looking at alternative ways for restorative justice and working with our juveniles and, you know, creating different ways using our traditional values and our heritage.

So some of the things we are seeing is we are going to, you know, come up with some shortfalls in our funding. One of the things in our testimony I want to bring to your attention is giving us more flexibility on the funding that we have. And flexibility is very important to the tribes as far as, you know, what we can do with the dollars.

These reports that we deal with and the criteria that we use for the funding is very stringent at times. So one of the things we want the committee to begin to consider is different funding strategies and methods to work with the Indian people.

We have 567 tribes across the country, all unique and all different in different ways. We cannot have a one size fits all for Indian people or governments.

So, again, is that we want you to consider looking at creating some alternative methods. Perhaps maybe your committee that you are setting up in the next piece of legislation to include Indian people. So, again, is that we want you to consider these directives.

The other part we want to bring to your attention in our testimony is the training Department of Justice. One of the things that we are seeing with the department is the understanding of Indian governments and Indian people.

As you know, the Department of Justice has three people working for Indian Country and the bureau has probably about six or seven hundred just here in D.C.

The report was given to you folks in 1997 to look at alternative ways to combine justice services with the Department of Bureau and the Department of Justice and that report was never acted upon for one reason or another. There is a recommendation to combine enforcement services and court services that you may want to reconsider.

So, again, Mr. Chairman, is that the flexibility is important to us. We do have 24 years of experience with self-government and so we are very open to recommendations to you and the committee to look at ways to work with the tribal government across the country.

Again, thank you very much.

[The information follows:]



**Testimony of the Honorable Henry Cagey, Councilman
Lummi Nation
FY 2014 Appropriations for the
United State Department of Commerce and Justice
Before the
House Appropriations Subcommittee on
Commerce, Justice, Science and Related Agencies**

Good morning distinguished Committee Members and thank you for this opportunity. As, a elected official of the Lummi Indian Business Council, it is an honor to speak on behalf of the Lummi Nation and present our appropriation requests for fiscal year 2014 to the Department of Commerce, Justice, Science and Related Agencies.

The Lummi Nation is one of the signatories to the Point Elliot Treaty of 1855. We are located in the northwest coast of Washington State. We have over 5,000 enrolled tribal members with a land base of 25,000 acres with 12 miles of tidelands. We are a fishing community with over 560 registered fishers. Since 1988, we have been at the forefront of the tribal self-governance initiative which includes: BIA and IHS. .

Lummi Nation Justice System: The Lummi Nation has a sophisticated justice system. Our Law Enforcement officers make nearly 4,000 arrests and our courts hold in excess of nearly 5,000 civil and criminal hearing annually. One of the biggest challenges we face is the high cost of incarceration. The Lummi Nation, like most Tribal governments, does not have its own jail facilities. We have developed and implemented an extensive web-based in-home detention system. We are developing a traditional restorative justice model to enable the incorporation of traditional values into our correctional services. This initiative is coordinated with multiple Tribal wide efforts to restore our traditional values into our contemporary services.

Violence Against Women Act (VAWA) Implementation: Lummi Nation is requesting that Congress assure all tribes that all available funds are on the table to implement VAWA and Tribal Law and Order Act (TOLA). We urge the committee to adopt criteria for implementation that provides the maximum flexibility for Tribes. During the implementation phase Tribes need access to all services that are available to state and county governments. This includes but is not limited to the Office of Victims of Crimes and the financial assistance that is available through the crime victim's fund, federal and state forensic labs, rape kits and sexual assault nurse examiners (SANE). The Department of Justice should recognize its trust responsibility assumed by the United States of America delegated to the Department of Justice.

VAWA Funding Strategy: We realize that the reauthorization of VAWA with tribal provisions is an historic land mark for recognizing tribal sovereignty. Therefore, we are prepared to engage

in a planning, implementation and enforcement strategy, which identify and transfer existing non-discretionary funding to the tribes and also identifying shortfall funding gaps.

Department of Justice Recommendations

We have prepared some recommendations for significant changes in the structure and operations of the Department of Justice to improve its ability to work effectively with Tribal Governments. We believe these recommendations should be one of the Committee's highest priorities.

1) Indian Justice Bureau (New)

Unlike the Bureau of Indian Affairs or Indian Health Service, the Department of Justice does not have a dedicated Indian bureau office and/or agency, to oversee its trust responsibilities and legal obligations to Indian tribes. Which, include providing adequate public safety to protect Indian citizens and oversee resources administered to Indian tribes. Currently, DOJ offers services for 567 tribal governments, which are provided by only three (3) permanent dedicated employees and literally hundreds who have some detailed or recurring partial responsibility. Therefore, we urge the Department of Justice to develop a true government-to-government relationship with all tribes.

Recommended Directives:

- Direct the Department to begin planning to create an Indian Justice Bureau within the Justice Department which will carry out programs services and budgetary policies of the Department services and staff from Indian Country working directly with Tribal governments.
- The Committee needs to schedule and hold hearings on this request, based on the current Bureau of Indian Affairs Law Enforcement organization structure and policies. We want to urge the committee to make this a high priority.
- Direct the Department of Justice and Interior to develop and implement a plan to move BIA law enforcement services to DOJ and employ Indian Preference in all staffing actions. This was presented as Option B in the, Report of The Executive Committee for Indian Country Law Enforcement Improvements *FINAL REPORT*, to the Attorney General and the Secretary of the Interior October 1997.
- At that time Option A was selected. This option proposed to re-organize the three (3) Bureau of Indian Affairs' Law Enforcement Programs into a single command structure. This option has not addressed the staffing of uniformed officers, training of officers, correctional services and jurisdictional issues that still plague the Department of Interior and Department of Justice Law Enforcement Programs.
- Example: Lummi Nation is served by regional BIA law enforcement official, who has done little or no coordination to the Lummi Nation for the past five years.

2) Recruitment of Qualified Tribal Members

There are very few qualified tribal members among the hundreds of DOJ employees responsible to carry out civil and criminal jurisdictional authority in Indian country over members of Indian tribes. These competencies are essential and must be reflected in DOJ's leadership and line positions. No member of an Indian tribe is: a federal judge, US Attorney, holds a leadership position, or oversees federal policy or resources for Indian tribes.

Restore Tribal Youth Coordinator – position needs be recruited and hired. This position provides subject matter expertise to multiple DOJ staff. This position needs to be filled with a person who is experienced and grounded in Indian Communities.

Recommended Directives:

- Direct the DOJ to create an Indian law training module that enables senior, line and station personnel to work effectively with Tribes. Hundreds of non-Indian senior leaders, FBI agents, US Attorneys and their staff, victim specialists, US Marshalls, grants managers, and dedicated Indian staff are not tribal members need to be educated and trained on how to work with tribes to understand the political relationship and responsibilities.
- Create hiring standards that require knowledge of working with Indian tribes and Indian law.
- Create a plan for the recruitment and hiring members of Indian tribes for political and career senior and staff line positions.

3) Funding Recommendations

Competitive funding awarded to Indian tribes is insufficient to meet their complex jurisdictional issues and social needs.

Recommended Directives and Hearing Requests:

- Direct the Department to create recurring funding like DOJ provides to state and local governments, create a dedicated Indian program to develop a non-competitive flexible grant program similar to Tribal Self-Governance.
- Further we want to request that the committee consider holding hearings for funding strategies that have worked for Indian Country for the past three decades. Self governance has worked for the Lummi Nation for the past 24 years. We offer our experience and knowledge to work with the Committee to develop these funding solutions.

4) Consultation

Seek and incorporate input from Tribal governments on federal operations and policy. Since 1998-after 15 years of being directed by the President to implement a Tribal Consultation Policy, the Department of Justice still does not have one.

Recommended Directives:

- Direct the Department to implement a DOJ Tribal Consultation Policy reflecting the recommendations provided by the Tribal Nations Leadership Council and the former Tribal Justice Advisory Group.
- Make the Tribal Nations Leadership Council a permanent FACA exempt advisory group. National organization whose governing boards are composed of elected tribal leaders should also receive this exemption.
- Apply the intergovernmental exception to all Justice Tribal advisory groups and task forces, representing tribal governments, elected and appointed officials.
- Develop recruitment, promotion and hiring policies which highlights the direct experience working in tribal governments and communities and who are knowledgeable of tribal governance, culture, language, and laws.

- These requests are consistent with Tribal Law and Order Act, Section 235 Sub-part “(m) NONAPPLICABILITY OF FACA.—The Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to the Commission.”

Department of Commerce Recommendations

Lummi Nation has also developed the following recommendations for the US Commerce Department:

Climate Change

We believe that climate change is a big factor in the decline of our fisheries and our way of life. Some of the factors that contribute to the water crisis are due to climate change. The Lummi Nation has seen increased flooding, increased temperatures, increased erosion, loss of habitat, loss of wild salmon, loss in other species; sturgeon, river smelt, eels, spring Chinook, chum, further we believe this also impacts marine wildlife, eagles, beavers, seals, etc.

The Nooksack River has been a life source for the Lummi Nation and other tribes for their way of living that we are losing. We are witnessing the destruction of the eco-system in the Nooksack River. We need assistance to identify the impact of climate change on our fisheries, housing, land base which is made up of 12 miles of tidelands which produce substantial amounts of shellfish and are particularly susceptible to the negative impact of climate change. Therefore, we are asking the Committee for support in protecting this resource for the Lummi Nation and the next seven generations to come.

State of Art Salmon Hatchery

We believe there is a need for a plan describing the next generation of state of the art salmon hatcheries. We envision energy savings, operational savings, increase productions, sustainability for the community. We want to remind the Committee that this hatchery will not only service our community but the 15 user groups that would benefit 500,000 people. We have evidence that our fish have been identified as far south as California and as far north as Alaska. We are requesting financial support for this planning project.

Hy'shqe,

Henry Cagey, Councilmember

Mr. WOLF. Thank you.

Well, we will look at that too. And when we put the panel together, maybe we should look at the incarceration with regard to that issue too.

But thank you for bringing that to our attention.

Mr. Fattah.

Mr. FATTAH. I agree, and thank you for your testimony, sir.

Mr. CAGEY. Thank you.

Mr. WOLF. Our next witness will be George Thurman at Sac and Fox Nation.

Mr. Thurman, welcome.

THURSDAY, MARCH 21, 2013.

SAC AND FOX NATION

WITNESS

GEORGE THURMAN, PRINCIPAL CHIEF

Mr. THURMAN. Good morning. I want to thank you for giving the Sac and Fox Nation the opportunity to present testimony before this committee today.

And we want to thank you for the dedication, your dedication to the Indian programs. And I am here to specifically submit a tribal specific budget request in the amount of \$4.8 million to fully fund the Sac and Fox Nation Juvenile Detention Center.

We are located in central Oklahoma. We are a tribe of about 4,000 of which 2,600 live within the State. We are proud to say that we are the tribe that Jim Thorpe came from and we are right—

Mr. WOLF. Jim Thorpe from Pennsylvania.

Mr. THURMAN. I am sorry, sir.

Mr. WOLF. Jim Thorpe who lived in Pennsylvania and went on to the Olympics.

Mr. THURMAN. He never lived in Pennsylvania, but that is a different story. We are right in—

Mr. WOLF. From the movie I saw, he lived in Pennsylvania.

Mr. THURMAN. Don't believe everything you see on TV because they on that point were trying to repatriate in court and bring his body back to Oklahoma for proper burial.

Mr. WOLF. There is the man to talk to right there.

Mr. THURMAN. Okay. But this—

Mr. WOLF. Was he ever returned the medals? I thought they were returned; were they not?

Mr. THURMAN. They were returned, finally returned. The family fought forever and finally got them.

Mr. WOLF. Burt Lancaster played the role. It was a movie. Actually, it made me angry that they took them. And now I see these Olympic stars are just making—and they took it away. But I did think that they did return them.

Mr. THURMAN. Yeah. Okay. And the passage of Tribal Law and Order Act was applauded by the Sac and Fox Nation because we saw this as an opportunity for the Federal Government to finally

fulfill the commitment to the nation and fully fund our juvenile detention center.

In 1994, we opened the doors to our juvenile detention center. After years of planning and construction, that was made possible by funding from the Department of Interior Bureau of Indian Affairs.

This juvenile detention center is the first juvenile facility designed for American Indians, Alaskan Natives, as well as the first juvenile facility developed under Public Law 104-72, the Self-Governments Demonstration project.

The center is a full service, 24-hour juvenile detention center that provides basic detention services to all residents to ensure their health, safety, and welfare, provides programs tailored to meet the specific needs of our clients.

These programs include behavioral management, substance abuse, spiritual, cultural, self-esteem, arts and crafts, health and fitness, horticulture, nutrition, life skills, counseling and educational programs.

The 39 tribes including the southern plains region which covers Oklahoma, Kansas, Texas will support the juvenile detention center, but due to under-funding and staffing shortages, the center cannot accommodate the detention needs of the regional tribes.

In fiscal year 2013, then-Assistant Secretary Larry Echo Hawk requested \$6.5 million for detention correction. We take great exception to this request inasmuch as the Department of Interior Bureau of Indian Affairs has never provided the full funding that was committed for the appropriation planning and construction process of the juvenile detention center.

This is the year 2013. Opened the doors in 1994. Nineteen years we have been waiting and have never had that full commitment of full funding yet.

The Sac and Fox Nation, due to the failure of full funding commitment by federal officials not being honored, has had to utilize funds that could have been used for other social service needs. We are committed to working with the Federal Government in an effort to help them fulfill their financial commitment.

With the promise of full funding realized, the juvenile detention center will be ready, willing, and able to meet the needs of tribes who need our help in guiding their children towards a successful future while providing a culturally and spiritually sensitive environment.

However, the needs of these tribes and children we serve will continue to be unmet as long as new facilities continue to be funded and constructed without funding for operations.

So there is an opportunity for you as the executive branch of the United States of America to work through the Sac and Fox Nation to improve the lives of those children that have made poor choices. These choices are usually based on the absence of guidance, culture, and discipline.

Sac and Fox Nation center is committed to the rehabilitation of our native children insomuch despite the lack of funding.

The juvenile detention center offers each juvenile located there an opportunity to receive continuing education through our local high school. The students are afforded everything accompanying a

public school including a graduation ceremony if they reach state requirements.

About two years ago, we had one young lady that did graduate there and I was a part of that ceremony that helped provide a diploma to her.

The possibilities are endless but unrealized because despite the use of tribal funds and various grants, the funding is inadequate to operate the facility. Therefore, the Sac & Fox Nation is requesting that the Federal Government recommit the funding for the juvenile detention center.

Thank you.

[The information follows:]

Sac and Fox Nation

920883 S. Hwy. 99 Bldg. A • Stroud, OK 74079

Principal Chief GEORGE THURMAN
 Second Chief ORVENA (TWIGGY) GREGORY
 Secretary JACKLYN K. WILLIAMS
 Treasurer CARLA REED
 Committee Member STELLA NULLAKE



**TESTIMONY OF THE HONORABLE GEORGE THURMAN, PRINCIPAL CHIEF
 SAC AND FOX NATION
 SUBMITTED TO THE HOUSE COMMERCE, JUSTICE, SCIENCE
 AND RELATED AGENCIES APPROPRIATIONS SUBCOMMITTEE
 ON THE FY-2014 BUDGET FOR JUSTICE PROGRAMS**

March 21, 2013

Chairman Wolfe and distinguished Members of the Committee, my name is George L. Thurman, and I am the Principal Chief of the Sac and Fox Nation. I thank you for the opportunity to present the Sac and Fox Nation's testimony before this esteemed Committee. *We appreciate your dedication to Indian programs and respectfully submit a Tribal Specific Budget Request in the amount of \$4.8 million to fully fund the Sac and Fox Nation Juvenile Detention Center.* We understand the fiscal constraints of the Country and together we can provide a future that has many opportunities for self-sufficiency through Self-Governance.

About the Sac and Fox Nation

The Sac and Fox Nation is headquartered in Stroud, Oklahoma, and our Tribal jurisdictional area covers Lincoln, Payne, and Pottawatomie Counties. Of the 4,000 enrolled Tribal members, 2,600 live in Oklahoma. We are proud to pay tribute to a Sac and Fox descendent and Great Native American, Jim Thorpe. One of the most revered Olympic athletes who has ever represented the United States; Mr. Thorpe won the pentathlon and decathlon in the 1912 Olympics.

Tribal Specific Budget Requests - \$4.8 Million for Juvenile Detention Center

The passage of the Tribal Law and Order Act was applauded by the Sac & Fox Nation because we saw this as the opportunity for the federal government to finally fulfill the commitment to the Nation and fully fund our Juvenile Detention Center (JDC). In 1994, the Sac and Fox Nation Juvenile Detention Center (JDC) opened its doors after years of planning and construction made possible by funding from the Department of the Interior, Bureau of Indian Affairs. The JDC is the first juvenile facility designed for American Indians/Alaska Natives as well as the first juvenile facility developed under P.L. 100-472, the Self-Governance Demonstration Project Act. The JDC is a full service, 24 hour juvenile detention facility that provides basic detention services to all residents to insure their health, safety and welfare and programs tailored to meet the specific needs of our clients.

These programs include behavioral management, substance abuse, spiritual, cultural, self-esteem, arts and crafts, health and fitness, horticulture, nutrition, life skills, counseling and educational programs. The 39 Tribes included in the Southern Plains Region are willing to support the JDC but due to underfunding and staffing shortages, the JDC cannot accommodate the detention needs of the regional Tribes.

In FY 2013 appropriations testimony provided by Assistant Secretary Larry Echo Hawk, he requested \$6.5 million for Detention/Correction and an additional 18 FTEs. We take great exception to the this request inasmuch as the Department of the Interior/Bureau of Indian Affairs has never provided the full appropriations that were authorized for the planning and construction phases of the JDC. The Sac and Fox Nation, due to the failure of the full funding commitment by federal officials not being honored, has had to utilize funds that could have been used for other social services needs. The Sac and Fox Nation is committed to working with the federal government in an effort to help them fulfill their financial commitment. With the promise of full funding realized, the JDC will be ready, willing and able to meet the needs of Tribes who need our help in guiding their children toward a successful future while providing a culturally and spiritually sensitive environment. However, the needs of these Tribes and the children we serve will continue to be unmet as long as new facilities are continually funded and constructed without funding for operations.

In FY 2004, the Office of the Inspector General issues the report, "Neither Safe nor Secure" – An Assessment of Indian Detention Facilities, citing the existence of serious safety, security, and maintenance deficiencies at detention centers throughout Indian Country. One of the primary recommendations was the need to identify and remedy staffing shortages whereby Indian Affairs responded that "current facilities still remain understaffed by a total of 373 positions (74 positions for Indian Affairs direct service programs and 299 positions for programs operated by Tribes under P.L. 93-638 and Self-Governance compacts).¹

There is an opportunity for you as the Legislative Branch of the United States of America to work with the Sac and Fox Nation to improve the lives of Indian children that have made poor choices. These choices are usually based on the absence of guidance, culture, and discipline. The Sac and Fox Nation JDC is committed to the rehabilitation of our Native children. Full-funding the JDC will offer each juvenile the opportunity to receive continuing education through a local High School. The students are afforded everything provided by a public school, including a graduation ceremony if they successfully achieve the state requirements. The possibilities are endless but are unrealized because despite of tribal funds and various grants, the funding is inadequate to operate the facility.

Therefore, the Sac and Fox Nation is requesting that the federal government recommit to funding for the JDC *in the amount of \$4.8 million.*

The Sac and Fox Nation is proud to be a Self-Governance Tribe. Thank you.

¹ FY 2013 U.S. Department of the Interior Budget Justifications – Green Book

Mr. WOLF. Mr. Chairman, thank you for your testimony. I appreciate it.

Mr. Fattah.

Mr. FATTAH. Thank you very much for your testimony, and I am sure we will get a chance to talk about it.

Mr. WOLF. Katie Monroe, Innocence Project.

There are going to be a series of votes, but what we are going to do is keep this going, so one of us will stay here.

So welcome.

Ms. MONROE. Okay.

Mr. WOLF. Your full statement will appear in the record.

THURSDAY, MARCH 21, 2013.

NATIONAL PARTNERSHIPS, INNOCENCE PROJECT

WITNESS

KATIE MONROE, SENIOR ADVOCATE

Ms. MONROE. Wonderful. Thank you so much for allowing me to testify this morning.

On behalf of the Innocence Project, I would like to respectfully request the following funding for DOJ programs in fiscal year 2014, \$3 million for Wrongful Conviction Review and Capital Litigation Improvement program, \$4 million for Kirk Bloodsworth Post Conviction DNA Testing program, \$12 million for the Paul Coverdell Forensic Sciences Improvement Grant program, sufficient funding to support the newly formed Joint DOJ–National Institute of Standards and Technology National Commission on Forensic Science.

Freeing innocent people from prison and preventing wrongful convictions greatly benefits public safety. Every time that we identify a wrongful conviction, it gives us the opportunity to identify the true perpetrator of that crime. And, in fact, in almost half of the 300 DNA exonerations to date, we have been able to identify that actual perpetrator and bring justice to the crime victim.

Unfortunately, during the time that those perpetrators were not apprehended, they went on to commit additional crimes while the innocent person was in prison.

Federal innocence programs are deeply important to this work because they provide the critical resources to identify and free the wrongly convicted and they provide resources that allow for reforms that prevent wrongful convictions meaning that we improve the accuracy of criminal investigations, strengthen criminal prosecutions, and create a stronger, fairer, more accurate system that provides true justice to crime victims.

To date, 303 individuals have been exonerated by DNA evidence in the United States including 18 of whom spent time on death row. These individuals spent on average more than 13 years each in prison and a combined number of more than 3,000 years wrongly imprisoned.

I have been working on innocence cases now for almost 20 years in a variety of capacities both with the Mid-Atlantic Innocence Project and the Rocky Mountain Innocence Center. It started actu-

ally with the case of my mother who was wrongly convicted in 1992. And because at the time there were no Innocence organizations available to help us, my family and I had to take on the long legal battle to free her which took 12 years.

That experience exposed me to the deeply profoundly acute need for expert attention and resources of post conviction claims of innocence. Funding for the Wrongful Conviction Review program has provided these resources in cases all across the country, especially at the Mid-Atlantic Innocence Project where I am a former board member.

That funding actually served to exonerate three individuals from Virginia in just the last two years, Gary Diamond who was exonerated just the week before last after five years wrongly imprisoned, Michael Hash who spent more than 12 years imprisoned in Virginia, and Thomas Haynesworth who spent 27 years wrongly imprisoned in Virginia.

In addition to these cases, the Bloodsworth Post Conviction DNA Testing program paid for the DNA testing that took place in both Mr. Haynesworth and Mr. Diamond's cases as well as for testing in Calvin Cunningham's case who is another exoneree from Virginia.

And even better, in the Haynesworth case, that same testing identified the actual perpetrator so we could close that case and bring justice to the crime victim.

It is important to note that the Bloodsworth program in particular, those funds go to state agencies which allow them to collaborate then with other organizations including Innocence network organizations in resolving these claims of innocence and allowing for that resolution to happen more quickly.

That was the case in Mr. Haynesworth's case where his attorneys worked together with Attorney General Cuccinelli to petition for his exoneration and writ of actual innocence.

In my current role as senior advocate for national partnerships at the Innocence Project, I focus on policies and programs to achieve reforms, for example, the Coverdell Forensic Sciences Improvement Grant which provides processing of vital forensic evidence and also oversight for independent government investigation, both of which improve the accuracy of forensic evidence and investigations and prosecutions.

And above and beyond these existing programs, the Innocence Project just wants to say that it is very happy and supportive of the recent establishment of Joint DoJ and NIST National Commission on Forensic Science and we would ask for sufficient funding to support that work.

Thank you very much for allowing me to testify this morning, and I am happy to answer questions.

[The information follows:]

Barry C. Scheck, Esq.
Peter J. Neufeld, Esq.
Directors

Maddy deLone, Esq.
Executive Director

Innocence Project
40 Worth Street, Suite 701
New York, NY 10013

Tel 212.364.5340

Fax 212.364.5341

www.innocenceproject.org

**WRITTEN STATEMENT OF KATIE MONROE, ESQ.
SENIOR ADVOCATE FOR NATIONAL PARTNERSHIPS, INNOCENCE PROJECT
ON THE DEPARTMENT OF JUSTICE'S FISCAL YEAR 2014 BUDGET**

**BEFORE THE HOUSE COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON
COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES
March 15, 2013**

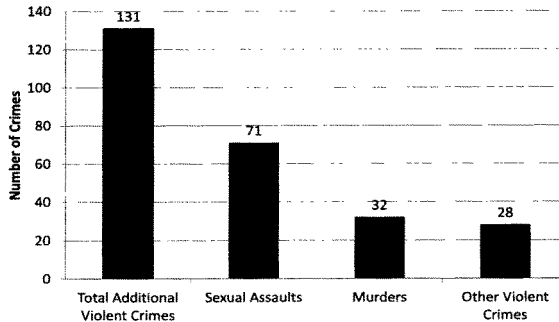
On behalf of the Innocence Project, thank you for allowing me to submit testimony to the House Committee on Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies as it considers budget requests for fiscal year 2014. I write to request funding for the following programs, please:

- **\$3 million** for the Wrongful Conviction Review and the Capital Litigation Improvement Programs (*the Wrongful Conviction Review Program is a part of the Capital Litigation Improvement Program*), at the Department of Justice (DoJ), Bureau of Justice Assistance (BJA);
- **\$4 million** for the Kirk Bloodsworth Post-Conviction DNA Testing Program (the "Bloodsworth Program") at the DoJ, National Institute of Justice (NIJ);
- **\$12 million** for the Paul Coverdell Forensic Sciences Improvement Grant Program (the "Coverdell Program") at the NIJ; and
- **Sufficient funding** for the National Institute of Standards and Technology to support the National Commission on Forensic Science.

Freeing innocent individuals and preventing wrongful convictions through reform ***greatly benefits public safety***. Every time DNA identifies a wrongful conviction, it enables the identification of the real perpetrator of those crimes. ***True perpetrators have been identified in approximately half of the over 300 DNA exoneration cases***. Unfortunately, many of these real perpetrators had gone on to commit additional crimes while an innocent person was convicted and incarcerated in their place.



Real Perpetrators: Additional Violent Crimes
 N=126 real perpetrators identified, affecting 147 exonerees



To date, 303 individuals in the United States have been exonerated through DNA testing, including 18 who served time on death row. These innocents served on average more than 13 years in prison before exoneration and release. However, I want to underscore the value of federal innocence programs not to just these exonerated individuals, but also to public safety, fairness, and achieving true justice for victims of violent crimes. It is important to fund these critical innocence programs because reforms and procedures that help to prevent wrongful convictions enhance the accuracy of criminal investigations, strengthen criminal prosecutions, and result in a stronger, fairer system of justice that provides true justice to victims of crime.

Wrongful Conviction Review Program

Particularly when DNA is not available, or when DNA alone is not enough to prove innocence, proving one's innocence to a level sufficient for exoneration is difficult compared to "simply" proving the same with DNA evidence. These innocents languishing behind bars require expert representation to help navigate the complex issues that invariably arise in their bids for post-conviction relief. And the need for such representation is enormous when only a small fraction of cases involve evidence that could be subjected to DNA testing. (For example, it is estimated that among murders, only 10% of cases have the kind of evidence that could be DNA tested.)

Realizing the imperative presented by such cases, the BJA dedicated part of its Capital Litigation Improvement Program funding to create the Wrongful Conviction Review program.¹ The program provides applicants—non-profit organizations and public defender offices dedicated to exonerating the innocent—with funds for providing high quality and efficient representation for potentially wrongfully convicted defendants in post-conviction claims of innocence.

¹ Reauthorization of the Innocence Protection Act. 111th Cong., 1st Sess., 8 (2009) (testimony of Lynn Overmann,

Innocence Project, Inc.
 March 15, 2013
 Page 3



The program's goals, in addition to exonerating the innocent, are significant: to alleviate burdens placed on the criminal justice system through costly and prolonged post-conviction litigation and to identify, whenever possible, the actual perpetrator of the crime. Above all, though, this program forms a considerable piece of the comprehensive federal package of innocence protection measures created in recent years; without it, a great deal of innocence claims might otherwise fall through the cracks.

Numerous local innocence projects have been able to enhance their caseloads and representation of innocents as a result of the Wrongful Conviction Review grant program, including those in Alaska, Minnesota, Pennsylvania, and at the University of Baltimore. During the past two years, the Florida Innocence Project was able to achieve the exoneration of Derrick Williams through the support of this program, and the Mid-Atlantic Innocence Project helped secure the exoneration of Thomas Haynesworth in Virginia. Grant funds enabled the Northern California Innocence Project to hire staff to screen cases, thereby permitting their existing attorneys to commit to litigation, which resulted in the exonerations of three innocent Californians, Obie Anthony, Maurice Caldwell, and Franky Carillo. With Wrongful Conviction Review funding, the Innocence Project of Minnesota was able to prove that Michael Hansen did not kill his three month old. Additionally, Darrin Hill was exonerated after being wrongly confined at a state mental health facility for 20 years. Staff, who were cataloging evidence at Orleans Parish Criminal District Court pursuant to the grant secured for the state by the Innocence Project New Orleans (IPNO), found the rape kit that was collected in the case. IPNO's research suggests this is the first case ever in which a person so committed has been freed due to proof of innocence. The DNA testing not only freed Darrin, it has also provided law enforcement with the actual rapist's DNA profile.

To help continue this important work, we urge you to please provide a total of \$3 million for the Wrongful Conviction Review and the Capital Litigation Improvement Programs. (*The Wrongful Conviction Review Program is a part of the Capital Litigation Improvement Program.*)

The Bloodsworth Program

The Bloodsworth Program provides hope to innocent inmates who might otherwise have none by helping states more actively pursue post-conviction DNA testing in appropriate situations. These funds have had a positive impact that has led to great success. Many organizational members of the national Innocence Network have partnered with state agencies that have received Bloodsworth funding.²

It is worth noting that the Bloodsworth Program does not fund the work of organizations in the Innocence Network directly, but state applicants which seek support for a range of entities involved in settling innocence claims, including law enforcement agencies, crime laboratories, and a host of others – often in collaboration. Additionally, the Bloodsworth Program has

² The Innocence Network is an affiliation of organizations dedicated to providing pro bono legal and investigative services to individuals seeking to prove innocence of crimes for which they have been convicted and working to redress the causes of wrongful convictions.



fostered the cooperation of organizations in the Innocence Network and state agencies. For example, with the \$1,386,699.00 that Arizona was awarded for fiscal year 2008, the Arizona Justice Project, in conjunction with the Arizona Attorney General's Office, began the Post-Conviction DNA Testing Project. Together, they have canvassed the Arizona inmate population, reviewed cases, worked to locate evidence and filed joint requests with the court to have evidence released for DNA testing. In addition to identifying the innocent, *Arizona Attorney General Terry Goddard has noted that the "grant enables [his] office to support local prosecutors and ensure that those who have committed violent crimes are identified and behind bars."*³ Such joint efforts have also been pursued in Connecticut, Louisiana, Minnesota, North Carolina, and Wisconsin. Program funding has contributed to at least 10 exonerations. Most recently, Robert Dewey was released from prison after serving nearly 18 years for a rape and murder he did not commit. Colorado's Justice Review Project was able to achieve his exoneration through DNA testing funded by the Bloodsworth program.

The Bloodsworth program is a relatively small yet powerful investment for states seeking to do critically important work: to free innocent people who were erroneously convicted and to identify the true perpetrators of crime. The Bloodsworth Program has resulted in the exonerations of 10 wrongfully convicted persons in 7 states, and the true perpetrator was identified in four of those cases. For instance, Virginian Thomas Haynesworth was freed thanks to Bloodsworth-funded testing that also revealed the real perpetrator. **As such, we ask that you please provide \$4 million to continue the work of the Bloodsworth Post-Conviction DNA Testing Program.**

The Coverdell Program

Recognizing the need for independent government investigations in the wake of forensic scandals, Congress created the forensic oversight provisions of the Coverdell Program, a crucial step toward ensuring the integrity of forensic evidence. Specifically, in the Justice for All Act, Congress required that

[t]o request a grant under this subchapter, a State or unit of local government shall submit to the Attorney General...a certification that *a government entity exists and an appropriate process is in place to conduct independent external investigations into allegations of serious negligence or misconduct substantially affecting the integrity of the forensic results* committed by employees or contractors of any forensic laboratory system, medical examiner's office, coroner's office, law enforcement storage facility, or medical facility in the State that will receive a portion of the grant amount.⁴

The Coverdell Program provides state and local crime laboratories and other forensic facilities with much needed federal funding to carry out their work both efficiently and effectively. Now, more than ever, as forensic science budgets find themselves on the chopping block in states and

³Arizona receives federal DNA grant, <http://community.law.asu.edu/news/19167/Arizona-receives-federal-DNA-grant.htm> (last visited Mar. 13, 2012).

⁴ 42 U.S.C. § 3797k(4) (emphasis added).

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localities nationwide, the very survival of many crime labs may depend on Coverdell funds. **As the program supports both the capacity of crime labs to process forensic evidence and the essential function of ensuring the integrity of forensic investigations in the wake of serious allegations of negligence or misconduct, we ask that you please provide \$12 million for the Coverdell Program in fiscal year 2014.**

The National Institute of Standards and Technology (NIST)

The Innocence Project was happy to learn about the establishment of a joint DOJ-NIST National Commission on Forensic Science, and we respectfully request that the Subcommittee allocate sufficient funding to the Commission to initiate and sustain its work. We encourage the Committee to provide funding directly to NIST to administer the Commission's Guidance Groups, which will be responsible for developing guidance on practices for federal, state and local forensic science laboratories and measurement standards to quantify the accuracy and reliability of various non-DNA forensic techniques. We also encourage the Committee to instruct the National Science Foundation to prioritize basic and applied research that will focus on scientific bases for those forensic disciplines, and to support NSF adequately so that it can significantly advance this work.

Additional Note on the Department of Justice's Budget Requests

In the past, the Department of Justice's budget requests have defunded two of the above programs – the Coverdell and Bloodsworth Programs. We are concerned about the impact that zeroing out the Bloodsworth and Coverdell programs would have on the requirements and incentives that they currently provide for states to prevent wrongful convictions and otherwise ensure the integrity of evidence. These incentives have proven significant for the advancement of state policies to prevent wrongful convictions. Indeed, the Coverdell program forensic oversight requirements have created state entities and processes for ensuring the integrity of forensic evidence in the wake of scandal that has undermined public faith in forensic evidence. ***The Coverdell program oversight requirements are essential to ensuring the integrity of forensic evidence in the wake of identified acts of forensic negligence or misconduct.***

The Innocence Project recommends that Congress maintain and fund these two programs by name, in order to preserve their important incentive and performance requirements. Doing away with these requirements would thwart the intent of Congress, which was to provide funding only to states that demonstrate a commitment to preventing wrongful convictions in those areas. Additionally, funding these programs would help to achieve their unique goals of providing access to post-conviction DNA testing for those who have been wrongfully convicted, and helping state and local crime labs process the significant amount of forensic evidence critical to solving active and cold cases, which helps to ensure public safety.

Conclusion

Thank you so much for your time and consideration of these important programs, and the opportunity to submit testimony. We look forward to working with the Subcommittee this year.

Mr. WOLF. Thank you, and I appreciate the good work you do. Most of them will be funded in the bill that we are offering.

Mr. Fattah.

Mr. FATTAH. I am quite aware of your work and I think it is a tribute to our country that people like yourselves would take the time and effort beyond your own family circumstance to help others similarly situation.

Thank you.

Ms. MONROE. Thank you. We appreciate your support.

Mr. WOLF. Olivia Eudaly with Big Brothers Big—excuse me. Ann Harkins, National Crime Prevention Council. Excuse me. I—

Ms. EUDALY. No problem.

Mr. WOLF. Your full testimony will appear in the record.

THURSDAY, MARCH 21, 2013.

NATIONAL CRIME PREVENTION COUNCIL

WITNESS

ANN HARKINS, CHIEF EXECUTIVE OFFICER

Ms. HARKINS. Thank you, Chairman Wolf and Ranking Member Fattah—Congressman Harris, thank you for being here—and the opportunity to testify before the subcommittee regarding fiscal year 2014 funding for the Department of Justice's grant programs.

I am Ann Harkins, president of the National Crime Prevention Council, and in CPC is the home of McGruff, the crime dog.

In this coming fiscal year, we respectfully urge the subcommittee to appropriate \$25 million for the Byrne Memorial Competitive Grants program and \$15 million for the Economic High Technology and Cyber Crime Prevention program.

NCPC works closely with state and local law enforcement and their national organizations to anticipate and respond to persistent crime challenges, emerging crime trends, and the changing crime prevention needs of communities nationwide.

We have four core competencies, public education, training, convening stakeholders to build crime prevention into communities and programs.

Through a Byrne competitive grant, the National Crime Prevention Council is working with the Department of Justice and a number of other partners to conduct a public education campaign to address the dangerous and costly problem of intellectual property crime. Our goal is to reduce demand for counterfeit and pirated products that pose a threat to public health and safety as well as to our economy.

We are working on several other projects to help people protect themselves, particularly from fraud.

On April 10th, NCPC will host a virtual conference for consumers and organizations that support them in avoiding and recovering from mortgage fraud.

We have solid school safety programs from kindergarten through university. We are tailoring crime prevention information to the overlooked population of people ages 18–24.

On the other end of the spectrum, we are providing practical, ready to use resources on crimes against senior citizens. An alarming number of seniors are physically, emotionally, sexually, or financially abused frequently by people they trust. These are crimes we can and should prevent.

Why the National Crime Prevention Council? Because crime extracts a significant financial cost, approximately \$3.2 trillion per year borne by victims, their families, employers, communities, and taxpayers.

In 2011, governments at all levels spent more than \$236 billion for police protection, correctional facilities, and legal and judicial costs. Corrections alone cost \$81 billion annually.

In 2010, violent crimes, murder, rape, assault, and robbery cost Americans \$42 billion. In 2011, consumers lost an estimated \$1.5 billion to fraud. There is also an unknowable opportunity cost both financial and social.

All of these costs have been trending upward and in the present economy, we can ill afford them. That is why your investment in crime prevention is so important. It is cost effective. It reduces the need for government spending on intervention, treatment, enforcement, and incarceration.

That is why we are asking you to continue your investment with \$25 million in fiscal year 2014 for the Byrne Competitive Grant program and to continue your commitment with a \$15 million investment in high technology and cyber crime.

Thank you again for the opportunity to be here today. And on a personal note, I want to thank Mr. Wolf and Mr. Fattah. Both of your staffs, committee and personnel, are just terrific. So thank you for the high quality you bring to this work.

The National Crime Prevention Council is proud to have worked with Congress, the Department of Justice, state and local law enforcement, and other agencies. As you continue your work to prevent crime, please consider NCPC and McGruff as your active partners in empowering citizens and working with local law enforcement to build safer communities.

[The information follows:]

**TESTIMONY OF ANN HARKINS
PRESIDENT AND CHIEF EXECUTIVE OFFICER
NATIONAL CRIME PREVENTION COUNCIL
HOUSE COMMERCE, JUSTICE, SCIENCE APPROPRIATIONS SUBCOMMITTEE
FISCAL YEAR 2014 PUBLIC WITNESS HEARING**

Thank you, Chairman Wolf and Ranking Member Fattah, for the opportunity to testify before the Subcommittee today regarding Fiscal Year 2014 (FY14) funding for the U.S. Department of Justice's Bureau of Justice Assistance. I am Ann Harkins, President and CEO of the National Crime Prevention Council (NCPC). In Fiscal Year 2014, we respectfully urge the Subcommittee to appropriate \$25 million for the Byrne Memorial Competitive Grants Program and \$15 million for the Economic, High-Technology, Cybercrime Prevention program.

NCPC has provided practical information on proven and cost-effective crime prevention practices to local law enforcement, community leaders, and citizens for more than 30 years. These activities have been supported through our longstanding effective partnerships with this Subcommittee and the Department of Justice's Office of Justice Programs (OJP). We hope that the difficult cuts via sequestration to law enforcement programs can be restored in Fiscal Year 2014, and offer our thoughts as to how to best utilize limited resources.

Within the funds for the Byrne Competitive Grants program, we respectfully request that the Subcommittee provide specific guidance to OJP to continue its historic support for two essential crime prevention functions. The first is ensuring the existence of independent, non-governmental national repositories of best practices and evidence-based crime prevention. This ensures that state and local law enforcement have access to the best materials on effective crime prevention practices—to get the best possible outcomes from the Subcommittee's investments in Byrne Justice Assistance Grants and in OJP's other state and local assistance programs. The second essential function is a strong national public education campaign to reach the general public with evidence-based crime prevention messages—a tactic which has been shown to have tremendous impact in changing individual and collective behavior to prevent crime.

We also want to applaud the Department of Justice for a well thought out, comprehensive grants program that supports the Intellectual Property Crimes Task Force. In the last few years OJP has awarded grants to state and local law enforcement to encourage strong investigations and effective prosecutions of Intellectual Property crimes which cost our economy 373,000 jobs and \$58 billion per year, and pose serious threats to Americans' health and safety. Those local efforts are supported by grants to programs like the National White Collar Crime Center.

The Department also wisely included a demand reduction component to this comprehensive effort. In partnership with both agencies, late in 2011 NCPC launched a public education campaign to increase public awareness of the consequences of purchasing counterfeit and pirated products: health and safety, support for organized criminal elements, and job loss. We hope the Subcommittee will support this effort and encourage OJP to continue this sensible approach of including demand reduction and public education in the effort to fight Intellectual Property crime. Grants through the Economic, High-Technology, Cybercrime Prevention program can continue this important purpose.

Background

NCPC is a private, non-profit, tax-exempt 501(c)(3) organization, whose primary mission is to be the nation's leader in helping people keep themselves, their families, and their communities safe from crime. Through different media and methods, NCPC enables communities and law enforcement to work together to create safe environments, especially for children and youth.

Established in 1980 by officials from nine states, the Department of Justice and other federal agencies, the Ad Council, and private philanthropists, the NCPC-led National Citizens' Crime Prevention Campaign and related initiatives have featured our beloved icon McGruff the Crime Dog® and his signature message that beckons all Americans to "Take a Bite Out of Crime®."

- 83 percent of adult Americans recognize McGruff.
- More than 80 percent of kids would follow his advice on crime prevention.
- Over 90 percent of adults describe McGruff as informative, trustworthy, and effective.
- And 72 percent think he's cool.

Federal resources invested in the National Citizens' Crime Prevention Campaign have been well spent. For every \$1 of federal investment, the Campaign generated \$100 or more in donated media. Over its history, the Campaign has produced \$1.4 billion worth of donated advertising.

Since the inception of the Campaign, NCPC has maintained a close partnership with the Department of Justice (DOJ) and local law enforcement in creating cost-effective and award-winning public education campaigns, launching groundbreaking and comprehensive support initiatives for crime-besieged cities, providing training and technical assistance, producing and distributing hundreds of ready-to-use publications filled with practical tips, expanding the reach of crime prevention tools through online resources, conducting conferences, and more. Our goal is to give you the tools you need on the ground and in the field.

Supporting Crime Prevention Practitioners

To the greatest extent possible, NCPC designs messages and trains law enforcement, community leaders, and other individuals on crime prevention practices with proven outcomes based on the highest standards of research. NCPC's commitment to promoting the most effective crime prevention tools and messages is based on the organization's capacity to monitor crime prevention research and translate that research into practice.

NCPC administers two membership organizations: the Crime Prevention Coalition of America (CPCA), an association of more than 400 local, state, and federal crime prevention-related organizations representing thousands of constituents, and the National Crime Prevention Association (NCPA), a membership organization of approximately 1,400 individual crime prevention practitioners, mostly from law enforcement.

Through Byrne Competitive Grant funding, NCPA has implemented the first national-level crime prevention specialist certification. To date, Virginia is leading the field with over half of those certified nationally belonging to the Virginia Crime Prevention Association (VCPA). I was pleased to attend the VCPA's conference last week.

With additional support from BJA, NCPC provides National Training and Technical Assistance to address the nationwide gap in education opportunities for new law enforcement officers, which was a result of local department cuts in training and crime prevention budgets. NCPC has trained consultants and experienced law enforcement officers who, in turn, train their communities, thereby stretching this initiative's dollars and impact. NCPC has also recorded or released five podcast interviews with experts in the field on topics such as Neighborhood Watch and Citizen Corps, crime-free multi-housing, and what a crime prevention officer is worth.

Soon we will develop a toolkit for new officers, which will include PowerPoint presentations, fact sheets, and resources on basic crime prevention. In 2012, we offered skill-building trainings on basic crime prevention in strategically selected regions across the country. We are in the process of planning the first regional training, which will be held in June in North Miami Beach.

National Crime Prevention Activities

NCPC works closely with state and local law enforcement and their national organizations to anticipate and respond to persistent crime challenges, emerging crime trends, and the changing crime prevention needs of communities and states nationwide.

Through a Byrne Competitive grant, NCPC is working with DOJ and a number of other partners to conduct a crime prevention awareness campaign to address the dangerous and costly problem of intellectual property crime, such as pirating and counterfeiting. Our goal for the campaign is to engage the public in demand reduction and decrease threats to public health and safety.¹ We are also working with law enforcement to bring the consequences of IP theft to the forefront for the public. Through focus groups and survey assessments NCPC uncovered that consumers do not expect to get caught. They do not believe that law enforcement is overly concerned about this problem because if law enforcement were concerned, the public would be more aware of the crime and subsequent IP prosecutions. In order to educate the public, we need to encourage and equip those officers and agencies who understand the impact to talk about IP investigations and arrests in the same way they would about a big drug bust or capture of a violent criminal.

We are also working on several other public education campaigns to help people protect themselves, particularly from fraud. On April 10th, NCPC will host a virtual conference for consumers and organizations that support them in avoiding and recovering from mortgage fraud. This exciting event will be fully online and freely accessible. It will provide valuable information to homeowners on how to protect themselves against mortgage scams. For law enforcement and direct service organizations, this is a wonderful opportunity to learn how to better serve the victims of such scams. This complements our individual- and community-focused work on foreclosure fraud and vacant property crime.

Additionally, we are tailoring crime prevention information to the overlooked population of young people ages 18 to 24. As teens and young adults leave their homes to pursue education and employment for the "first time," they are often the victims of criminals and scams that prey on their inexperience. That is why we are developing programs to help "first timers" protect themselves as they handle their first credit card, first apartment, first car, first college campus, first vacation on their own, and first job.

On the other end of the spectrum, we are providing practical, ready-to-use resources on crimes against senior citizens. Senior citizens are vulnerable to telemarketing and financial fraud that threaten their financial stability. We are also educating the public on the underreported crime of elder abuse. An alarming number of senior citizens are physically, emotionally, sexually, or financially abused—frequently by people they trust. We are striving to ensure that people of all ages can speak out and act to prevent abuse and victimization and live in safe communities.

Three years ago, NCPC set out to work on a new crime prevention initiative that would “inspire us to live in ways that embody respect... where we live, learn, work, and play.” That is our vision for the Circle of Respect. Lack of respect is contributing to online aggression and cyberbullying. A lack of respect is also contributing to crimes like school violence and property theft among teens. Studies show that young people join gangs because it’s the only place they get respect. Technological instances contribute as well—“sexting”—the sending of inappropriate sexual images through electronic devices—is rampant among young people. Sexting and cyberbullying have demonstrated tragic consequences.

The Circle of Respect is a national initiative that engages and challenges children, young people, adults, families, and communities to promote a culture of respect that transcends what has been a traditional tolerance of unacceptable behavior. Also, to provide a platform for young people to speak on their own behalf, the Circle of Respect website will host VOICES—a user-generated site for teens to speak about personal experiences of respect within their families, peers, and communities. We will use their submitted artwork, poetry, short stories, music, and films to guide development on respect-centered materials for other youth, service providers, and crime prevention practitioners.

Although the initial focus of the Circle of Respect is on cyberbullying and bullying, as the initiative expands we will address such crimes as gang violence, vandalism, child abuse, workplace violence, abuse and fraud aimed at seniors, dating violence, and substance abuse. As the circle expands from respect for self to respect in other aspects of our lives, we aim to reduce the opportunities for crime to occur.

These projects illustrate the breadth of NCPC’s work. Today, in addition to continuing our work on Lights, Locks, and Alarms, we also provide tips and tools on intellectual property crime, cyberbullying, and identity theft. We work with every demographic from young children to seniors. And we use every medium available to us—from training to Twitter—to educate crime prevention practitioners and the public about personal and community safety.

When McGruff and NCPC came on the scene 32 years ago, community groups and individual citizens thought that crime prevention was the sole responsibility of law enforcement. Working together with DOJ, local law enforcement, and communities all across the nation, we have “moved the needle” so that today, we know that crime prevention is everyone’s business. McGruff has carried the message that all people—whether they are 7 or 107—can do their part to prevent crime and make America safer. That’s what “Take A Bite Out of Crime” means. Now, three out of four adults know they have a personal responsibility for helping to keep their communities safe from crime.

New forms of crime are growing, such as identity theft, mortgage and foreclosure fraud, and cybercrimes of every stripe, and we must effectively deploy our tightening resources to combat crime. Crime extracts a significant financial cost—approximately \$3.2 trillion per yearⁱ—borne by victims and their families, employers, communities, and taxpayers. In 2011, governments at all levels spent more than \$236 billion for police protection, correctional facilities, and legal and judicial costs—corrections alone costs \$81 billion annually.ⁱⁱ

In 2010 violent crimes (murder, rape, assault, and robbery) cost Americans \$42 billion.^{iv} In 2011, consumers lost an estimated \$1.5 billion to fraud.^v There is also an unknowable opportunity cost both financial and social. All these costs have been trending upward and in the present economy we can ill afford them.

Crime Prevention in Fiscal Year 2014

Common sense, therefore leads to the conclusion that investment in crime prevention has never been more critical. There is no doubt that when individuals, community groups, and businesses work closely with law enforcement to help keep watch over their communities, crime is prevented. In an era of tightening budgets, investment in prevention initiatives reduces the need for government spending on intervention, treatment, enforcement, and incarceration. Credible studies conclude that crime prevention initiatives are cost effective; we can pay modest costs now or exorbitant ones later.

Though most crime prevention activities are local, the federal government sets the tone by promoting crime prevention strategies that work. It provides leadership through funding, education, technical assistance, and support for state and local programs. Research and identification of what works, and translation and transmission of evidence-based best practices and lessons learned to and among the field require national leadership.

Appropriations of \$25 million in FY14 for the Byrne Competitive Grant program will provide BJA continued resources to fund important crime prevention programs along with the other authorized criminal justice programs. The investment in national training, education, and technical assistance can help other law enforcement investments stretch further.

Finally, we urge the Subcommittee to remain committed to the Economic, High-Technology, Cybercrime Prevention program with a \$15 million investment in FY14. DOJ and OJP are effectively working to address Intellectual Property crimes, particularly with regard to educating and engaging the public on the issue, and should be supported in their activities going forward.

Thank you again for allowing me to appear today and for your ongoing commitment to state and local crime prevention programs. NCPC is proud to have worked with Congress, DOJ, state and local law enforcement and other agencies, and the private sector in the past, and we believe we can be competitive going forward. As Congress continues its work to prevent crime, please consider NCPC and McGruff as your active partners in empowering citizens and working with local law enforcement to build safer communities.

ⁱ <http://www.ncpc.org/sentinel>

ⁱⁱ http://www.centre.edu/cost_of_crime.pdf

ⁱⁱⁱ *Ibid.*

^{iv} http://www.americanprogress.org/wp-content/uploads/issues/2012/06/pdf/violent_crime.pdf

^v <http://www.ftc.gov/sentinel/reports/sentinel-annual-reports/sentinel-cy2011.pdf>

Mr. FATTAH [presiding]. Thank you, and thank McGruff, the crime dog.

We have a lot going on here, votes on the floor, but we are going to continue the hearing and me and the chairman will alternate and Dr. Harris, I am sure, too, between going down to the floor and so on. But it is no disrespect to any testimony that is taking place. And we do have the written testimony and excellent staff.

Thank you.

Ms. HARKINS. And we appreciate you very much.

Mr. WOLF [presiding]. Welcome.

THURSDAY, MARCH 21, 2013.

BIG BROTHERS BIG SISTERS OF AMERICA

WITNESS

OLIVIA EUDALY, VICE PRESIDENT OF EXTERNAL AFFAIRS

Ms. EUDALY. Thank you so much, Mr. Chairman and Ranking Member Fattah and Mr. Culberson from my home state and Dr. Harris.

It is a privilege to be here with you today. We are indebted and grateful to you for your wisdom and sensitivity toward youth issues that you have shown over the many years. And we are extremely grateful at Big Brothers Big Sisters.

We know that you have confidence and intentionality and that you are willing to put prevention money into helping kids stay out of trouble, high risk kids, and that is happening through your funding through OJJDP.

I come today as an advocate for the OJJDP Youth Mentoring Grants program, but also as a teacher, a community activist, and a firm believer in the transformative power of mentoring.

If I had the time this morning, I would share with you my own personal story as a high school teacher and a young senior who was only a few months from graduation, a promising young man, an intelligent young man, who got in with the wrong crowd and robbed a local fast food store, killed two employees, and is now serving a life sentence.

It is for that reason I am in this work and I know firsthand the absolute crucial necessity of putting a caring adult in the life of at risk kids. And I know full well and I understand that it, in fact, is a national security issue, as Mr. Fattah is beautifully presenting it.

And that is where the young mentoring grants through OJJDP come into play. They have allowed Big Brothers Big Sisters to expand mentoring programs to America's under-served youth to break the chain of events in the lives of kids who are at risk.

Youth mentoring grants are competitively awarded to a variety of nonprofits that serve to reduce youth interaction with the juvenile justice system.

As you are aware, grantees of the YMG provide youth mentoring services to at risk and high risk youth under 18 years of age with the goal of reducing juvenile delinquency, drug abuse, truancy, and other problem behaviors and high risk behaviors.

As one of those grantees, Big Brothers Big Sisters, it is important for you to know that we are the only national evidence-based, one-to-one mentoring program with measurable outcomes in the country.

Since 2009, CJS funds through OJJDP have provided Big Brothers Big Sisters with the opportunity to support over 35,000 youth in one-to-one mentoring relationships.

Having exceeded our goal, our original goal of 30,500, we respectfully request that CJS continue to fund the youth mentoring grants and to do so at a rate of \$90 million during fiscal year 2014.

Across our 355 local agencies, Big Brothers Big Sisters' mentors meet with their matches at least three times a month for three to five hours for a maximum of one hour. The program's hallmark is the supervision of the match relationship which includes regular scheduled visits and phone conversations among the mentor, the parent, and the child supervised by the caseworker.

The Big Brothers Big Sisters model incorporates all leading best practices and is effective at producing youth outcomes.

Research has shown that kids who are matched with a big brother or big sister are less likely to use drugs, less likely to use alcohol, less likely to skip school, less likely to bully. They have better feelings of self-worth and they have higher performance in school.

It is a given that youth who have less drug use, less alcohol use, less truancy, and better academic performance are less likely to be involved in the criminal justice system. And so we have what we call in our world prevention.

Big Brothers Big Sisters exceeded its goal and we ask you to fund us, fund the youth mentoring grant at \$90 million in the coming fiscal year 2014.

And we thank you, we thank you for your wisdom and your sensitivity to these issues.

[The information follows:]

TESTIMONY OF
BIG BROTHERS BIG SISTERS OF AMERICA
230 NORTH THIRTEENTH STREET
PHILADELPHIA, PA 19107

BEFORE
THE HOUSE APPROPRIATIONS
COMMERCE JUSTICE SCIENCE SUBCOMMITTEE

MARCH 15, 2013

Submitted By:

Kelley Gilbert
Director of Government Relations
400 7th St NW, Suite 505
Washington, DC 20004

Chairman Wolf and Ranking Member Fattah, thank you for the opportunity to provide testimony before the House Appropriations Commerce-Justice-Science Subcommittee. On behalf of Big Brothers Big Sisters' 408,412 Bigs and Littles, as well as our network of 355 local affiliates I am here to respectfully advocate for \$90 million to support the Youth Mentoring Grants program at the Office of Juvenile Justice and Delinquency Prevention (OJJDP). Youth Mentoring Grants are competitively awarded to nonprofit organizations that reduce youth interaction with the juvenile justice system. Grantees must provide mentoring services to at-risk and high-risk youth under 18 years of age with the goal of reducing juvenile delinquency, drug abuse, truancy, and other problem and high-risk behaviors. Types of services provided include direct one-to-one mentoring, group mentoring, or peer-mentoring services to underserved and at-risk youth populations, such as youth with a parent in the military, including a deployed parent.

Big Brothers Big Sisters is the nation's only evidence-based mentoring program focusing on proven outcomes in a scalable model across all 50 states. Our mission is to help children reach their potential through professionally supported, one-to-one relationships with measurable impact. We are a grassroots organization of 355 local BBBS agencies serving thousands of communities throughout the country. We began over a century ago to provide services to at-risk youth in need of additional support and guidance and last year as a national network we served over 204,206 children and youth in one-to-one mentoring relationships.

We know that our nation's children face greater obstacles today than ever before. The Office of Juvenile Justice and Delinquency Prevention's Juvenile Offenders and Victims National Report 2012 indicates that:

- In 2009, juvenile courts in the United States handled approximately 1.5 million delinquency cases that involved juveniles charged with criminal law violations
- The female proportion of the delinquency case load has risen to 28% in 2009, a sharp rise since 1985 reports of 19%.

According to the recent Defending Childhood Report by the Department of Justice, of the 76 million children in the US, an estimated 46 million are exposed to violence, crime and abuse on an annual basis. Children exposed to violence and trauma are at increased risk of disruptive behavior, cognitive and non-cognitive impairments, post-traumatic stress disorder, depression and substance abuse. With police making approximately 2.1 million juvenile arrests each year, and over 1.7 million youth are referred to the court system, of which 200,000 youth are prosecuted in the adult criminal justice system, it is clear our nation needs an evidence-based solution that works to prevent at-risk youth from entering the justice system.¹

“The long-term negative outcomes of exposure to violence can be prevented, and children exposed to violence can be helped to recover. Children exposed to violence can

¹ Puzanachera, C. (December 2009). Juvenile Arrests, 2008. Washington, DC, Juvenile Justice Bulletin, U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention, available at: <http://www.ncjrs.gov/pdffiles1/ojjdp/228479.pdf>

Knoll, C. and Sickmund, M. (June 2010) Delinquency Cases in Juvenile Court, 2007. Washington, DC, U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention, available at: <http://ncjrs.gov/pdffiles1/ojjdp/230168.pdf>

heal if we identify them early and give them specialized services, evidence-based treatment, and proper care and support. We have the power to end the damage to children from violence and abuse in our country; it does not need to be inevitable.” - Department of Justice and Centers for Disease Control and Prevention’s groundbreaking National Survey of Children’s Exposure to Violence (NatSCEV).

As a nation we need to take a hard look at how we spend and how we invest. We need innovative responses that are evidence-based and that have real and long-term cost-saving benefits. There is a difference between investment and spending. To reduce the number of young people entering the criminal justice system, we must invest in youth development. In Fiscal Year 2013, both the House and the Senate Commerce Justice Science bills recommended \$90 million for the Youth Mentoring Grants program. In Fiscal Year 2014, Big Brothers Big Sisters encourages Congress to fund the Youth Mentoring Grants program at \$90 million to continue this important work.

OJJDP’s Youth Mentoring Grants are upfront and forward-thinking investments that divert at-risk and high-risk youth away from the criminal justice system. Investing in youth mentoring could be considered insignificant when compared to the alternative downstream costs of arrest, prosecution and incarceration. While it may require \$88,000 a year to incarcerate a juvenile offender, Big Brothers Big Sisters needs just \$1,700 a year to mentor a child in a one-to-one relationship. Furthermore, while States bear the entire cost of incarcerating an individual, funds appropriated for youth mentoring can and should be used to leverage hundreds of millions in private and foundation donations – thereby multiplying the effect of public investment.

The Big Brothers Big Sisters program model incorporates all leading best-practices and is effective at producing positive youth outcomes. There is strong evidence that makes the case for placing a Big Brother or Big Sister in the life of an at-risk youth in order to prevent and respond to juvenile delinquency and victimization. Our program model works as an effective and efficient strategy for supporting at-risk youth. According to 1995 Public/Private Ventures’ (P/PV) landmark impact study², children who are matched with a Big Brother or Big Sister were:

- 46% less likely to begin using illegal drugs
- 27% less likely to begin using alcohol
- 52% less likely to skip school
- 37% less likely to skip a class
- more confident of their performance in schoolwork
- less likely to hit someone
- getting along better with their families

Intuitively we know that children with less drug or alcohol use, less truancy, better academic performance and strong family lives are less likely to be involved in the criminal justice system. However, Big Brothers Big Sisters is also relentless in our drive to develop hard data resources. Our current *Nationwide Strategic Direction* reinforces our dedication to expanding and improving the impact our mentoring programs have on the youth that are at the greatest risk of

² Tierney, J.P., Grossman, J.B., and Resch, N.L. (1995) *Making a Difference: An Impact Study of Big Brothers Big Sisters*. Philadelphia: Public/Private Ventures

entering, or are already in, the juvenile justice system. This firm commitment to averting youth away from juvenile delinquency has manifested itself in the creation of the Big Brothers Big Sisters Juvenile Justice Initiative.

With a competitively awarded National Mentoring Grant between Fiscal Years 2010 and 2012 we committed to reducing the incidence of juvenile crime in underserved communities across the country by expanding our evidence-based mentoring services to more than 30,500 newly identified high-risk and at-risk youth. We also established ten pilot sites to direct our learning around how to effectively establish relationships with juvenile justice systems and organizations that will yield referrals of youth who are currently or previously involved with the juvenile justice system. The pilots have enabled us to learn about which segments of youth Big Brothers Big Sisters can best impact, what resources agencies need to effectively serve this population, and how to efficiently navigate the juvenile justice system as a youth service organization. Outcome data and assessments from these ten locations, are being reviewed and research-based practices are being extracted and broadly applied to other Big Brothers Big Sisters affiliates serving communities with particularly high populations of high-risk delinquent youth.

OJJDP defines “at-risk youth” as youth exposed to high levels of risk in their families, homes, communities, and social environments to such a degree that it could lead to educational failure, dropping out of school, or juvenile delinquency. Historically, this has been the population that Big Brothers Big Sisters has served. The Department of Justice’s investment in our Juvenile Justice Initiative represents confidence in our network’s ability to increase the number of high-risk youth – youth with present or past involvement with the juvenile justice system - that we serve across the country.

To date we have formalized high-risk referral sources, built resources for the larger mentoring and delinquency prevention field, and set up the infrastructure to measure the specific diversionary impact Big Brothers Big Sisters mentoring programs have on at-risk and high-risk youth from juvenile delinquency, alcohol and drug use, truancy, and other problem behaviors. Some of the specific settings where high-risk youth could benefit from Big Brothers Big Sisters mentoring programs that have been identified for preferred partnerships include: delinquency and dependency courts, probation, schools and detention and correction centers. Currently 103 Big Brothers Big Sisters agencies in urban and rural areas are receiving Youth Mentoring Grants to service system-involved youth, children in military families and children on tribal lands. The work with these sites will continue with an emphasis on extracting truancy prevention and intervention best practices as well as testing improved measurements of Big Brothers Big Sisters risky behavior outcome data. A number of National Juvenile Justice partnerships, including the American Probation and Parole Association and the National Center for School Engagement, have already been established to help drive network capacity to better serve at-risk and high-risk youth.

In 2012, our National Mentoring Grant allowed agencies to collect relevant juvenile justice data, rollout mentor and staff trainings specific to working justice-involved youth, and real-time tracking of youth outcomes as they relate to risky behaviors and delinquency. In addition, Big Brothers Big Sisters will release a formal publication of best practices for working with high-risk youth and an analysis of the Juvenile Justice Initiative successes. Through the initial investment by the Office of Juvenile Justice and Delinquency Prevention, Big Brothers Big Sisters of

America has the infrastructure, data, and commitment to expand the Juvenile Justice Initiative to all 355 Big Brothers Big Sisters agencies and the 42,700 youth on Big Brothers Big Sisters waiting lists to better substantiate the necessary role of mentoring in juvenile delinquency prevention and share with the larger community the practices, data, and research to maximize impact.

In addition to our effective program practices, Big Brothers Big Sisters of America is committed to ongoing research and evaluation of our one-to-one mentoring model. Big Brothers Big Sisters staffs an internal Research, Evaluation, and Innovation team and also consults with the leaders of America's youth mentoring research community through a 10-member Research Advisory Council. While the effectiveness of Big Brothers Big Sisters was established when Public/Private Ventures (P/PV), examined Big Brothers Big Sisters programs in its landmark publications in the 1990's, Big Brothers Big Sisters undergoes continued evaluation of our programs with the following OJJDP projects funded:

- Supported by OJJDP and the Thrive Foundation, researchers from University of Illinois-Chicago and Portland State University are studying an enhanced community-based mentoring model that incorporates a more youth-centered approach into the mentoring relationship by way of enhanced staff training, structured group activities, and more directed match support. Enhancements in this model are rooted in thriving and youth resiliency science.
- Supported by OJJDP, researchers from Portland State University and Boston University will study reasons for early termination of mentoring relationships.

Big Brothers Big Sisters will continue to use mentoring evaluation as a means to strengthen our programs and inform the mentoring community of best practices.

In closing, Big Brothers Big Sisters of America fully understands the legitimate pressure on Congress to reduce the scope, size and cost of government. However, we urge the Committee to view juvenile justice programs in general and youth mentoring grants in particular as small investments with big dividends. We ask you to keep in mind that the children we mentor today are the future parents of our grandchildren. If we are to be serious about the long-term fiscal and social success of our country, we need to ensure the success of our children today. Big Brothers Big Sisters of America sincerely thanks this Committee for its past leadership on behalf of youth-development and respectfully requests your continued support.

Mr. WOLF. Thank you very much for your testimony.
I have no questions.

Mr. Fattah.

Mr. FATTAH. Thank you for your work.

And the chairman is being modest in the bill that we are getting ready to pass on the floor. The only area of increase is in youth mentoring.

Ms. EUDALY. Yes, sir.

Mr. FATTAH. We have \$88 million and the Senate had a much lower number. But because of the process that the chairman engaged in, we were very successful.

And so thank you and we appreciate your work.

Ms. EUDALY. We thank you so much.

Mr. WOLF. And Mr. Fattah just so you know.

Ms. EUDALY. We thank you so much. We thank you so much.

Mr. FATTAH. Thank you——

Ms. EUDALY. Thank you.

Mr. FATTAH [continuing]. For all the sacrifice and hard work.

Ms. EUDALY. Thank you. Thank you. Thank you.

Mr. WOLF. Our next witness will be David Bean, Puyallup Tribe of Washington.

Your full statement will appear in the record.

THURSDAY, MARCH 21, 2013.

PUYALLUP TRIBE OF WASHINGTON

WITNESS

DAVID Z. BEAN, TRIBAL COUNCILMAN

Mr. BEAN. Thank you.

Mr. Chairman, Ranking Member Fattah, members of the committee, thank you for the opportunity to provide testimony on fiscal year 2014 Appropriations for tribal programs within the Department of Justice.

My name is David Bean, I am a council member for the Puyallup Tribe of Indians located in the State of Washington. I send the regards of my chairman, Herman Dillon, Sr. who was not able to be here with us today.

Although the President's fiscal year 2014 budget has not yet been released, we remain optimistic that Congress and the Administration will come to terms on broader budgetary issues and that the fiscal year 2014 budget will find essential justice of department programs important to Indian tribes and that is commensurate with our well-documented needs. We remain committed to working with Congress to this end.

The Puyallup Tribe's first priority is insuring the safety and security of our community. We appreciate the efforts of the subcommittee, we raise our hands to you and thank you for all that you have done in your continued funding of tribal programs within the following offices of the Department of Justice.

The Office of Justice Programs, the Office of Community Oriented Policing Services, and the Office on Violence Against Women.

Last year the Department of Justice proposed to provide for a seven percent tribal set aside for all discretionary OJP programs to address Indian country public safety and criminal justice needs.

The Puyallup Tribe again joins with the National Congress of American Indians and other tribes in urging Congress to include the seven percent trial set aside in fiscal year 2014 bill language.

In a recent report the Department of Interior estimated that an \$8.4 billion need over the next ten years exists in order to bring tribal and Bureau of Indian Affairs detention centers up to current standards.

To address this legal request at a minimum \$30 million would be appropriated for the detention facilities and construction in the country programs.

The Office of Community Oriented Policing Services fiscal year 2013 budget request also includes \$286 million for COPS programs. The tribe generally supports this request, but we noted that the demonstrated need for additional law enforcement personnel in Indian country alone is \$42 million which is three times more—nearly three times more than the \$15 million specifically included for hiring tribal law enforcement officers.

The tribe again requests the fiscal year 2014 bill language including \$42 million for additional law officers in Indian country to address this serious shortfall of law enforcement personnel.

The fiscal year 2014 budget also provided \$20 million for the COPS tribal resource grant program. While the tribe supports this increase of funds to the necessary law enforcement resources, we noted that in fact \$40 million is needed to sufficiently fund the tribal resources grant program.

If our tribe in Indian country in general is to live in safety and focus on health, education, and economic development, then our law enforcement officers must have the necessary equipment to adequately fulfill their responsibilities.

In the Office on Violence Against Women, the fiscal year 2014 budget requested \$412 million for the Office on Violence Against Women, including \$500,000 for the Indian country sexual assault clearinghouse.

The tribe has supported these requests in the past and we continue to do so today. The tribe also joins with other tribes and native women across the nation in commending Congress and the administration on the recent reauthorization of the Violence Against Women Act.

We request that the fiscal year 2014 bill language include requisite funding for additional resources to tribal justice departments to help them exercise this inherent authority. This additional funding will be absolutely critical to a successful implementation of the law.

And finally the tribe's sincere hope is that the fiscal year 2014 bill language would render the drastic cuts in fiscal year 2013 appropriations implemented under the sequester.

The across-the-board five percent cuts to already under-funded programs will have devastating impacts on Indian country and reverse or delay tribal efforts to improve our economies and the health and well being of our members.

I thank you for the opportunity to speak today.

[The information follows:]

**MR. DAVID BEAN, PUYALLUP TRIBAL COUNCIL
TESTIMONY OF THE PUYALLUP TRIBE OF INDIANS BEFORE THE
HOUSE SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE AND
RELATED AGENCIES
FISCAL YEAR 2014**

Mr. Chairman, my name is *David Bean, Tribal Councilmember for the Puyallup Tribe of Indians*. On behalf of Chairman Dillon, the Tribe thanks the Committee for its past and on-going support of numerous tribal issues. I am pleased to present testimony regarding the continued funding of the following offices within the Department of Justice: the **Office of Justice Programs (OJP)**—the Tribe urges Congress to reinstitute the 7% tribal set-aside from all discretionary OJP programs, which would provide more than \$80 million for tribal justice programs; the **Office of Community Oriented Policing Services (COPS)**—the Tribe supports the FY 2013 Budget request of \$286 million, with an additional \$27 million for hiring law enforcement personnel and an additional \$20 million for the Tribal Resources Grant Program; and the **Office on Violence Against Women (OVW)**—the Tribe supports the FY 2013 Budget request of \$412 million and further requests that funding be provided for the implementation of the tribal provisions of the Violence Against Women Act Reauthorization of 2013 (VAWA).

Introduction: Public safety and criminal justice systems are the foundation for community stability and the wellspring for economic development and entrepreneurship. We look forward to working with the 113th Congress to ensure that funding levels in the FY 2014 Budget are sufficient to meet and carry out our public safety and justice responsibilities. We note at the outset, that at the time this testimony is being submitted the President's FY 2014 Budget has not yet been released. We remain optimistic that Congress and the White House will find common ground on the broader budgetary issues and that the FY 2014 Budget will fund essential Justice Department programs important to Indian tribes at levels commensurate with our well documented needs and be mindful of the federal government's trust responsibility to tribes.

By ensuring tribal access to OJP funds, COPS grants, and funding to implement VAWA and other OVW programs, this Committee will ensure that tribal governments can be active stakeholders in promoting and enhancing law enforcement and criminal justice services in our communities and in partnership with surrounding jurisdictions.

The Puyallup Reservation is one of the few reservations located in an urban setting, where we must deal with the reality of gang violence. The reservation is located in the Seattle-Tacoma area of the State of Washington. Our reservation is a little more than 18,000 acres in size and includes parts of several different municipalities, including Tacoma, Fife, Milton, Puyallup, Edgewood, and Federal Way. In addition, the Puyallup Tribe provides services for more than 4,000 Tribal members and more than 25,000 additional Native Americans who reside in the area.

The Puyallup Tribal Police Department is led by a Chief of Police, and staffed by twenty-nine commissioned officers and two reserve officers. The Department preserves peace and order within the boundaries of our reservation, in addition to the usual and accustomed areas. Unfortunately, due to limited federal funding for law enforcement in Indian country, only two of our twenty-nine officers are funded with federal funds. The remaining twenty-seven officers and additional nine detention officers are funded by the Tribe. The total cost of Tribal justice services, including facilities operations and maintenance, exceeds \$5.7 million per year.

The law enforcement and criminal justice programs we must subsidize with Tribal revenue—due to chronic underfunding by the United States—deprives us of revenues we otherwise require for Tribal housing, health care, education, cultural and social programs for our members.

The Tribe is fortunate to have a good working relationship with state, county, and local law enforcement agencies. In fact, we have had intergovernmental agreements with Pierce County and the City of Tacoma for many years. Tribal police officers are cross-deputized so that arrests can be made not only under tribal jurisdiction, but under city or county jurisdiction as well—in these instances offenders are turned over to the local authorities to be processed. We cannot adequately convey to you how important these cross-deputization agreements are to the Tribe.

Despite these intergovernmental agreements, the Tribe's law enforcement division is exceeding its maximum capabilities, due to an ever-increasing population. Without the large subsidy provided by the Tribe for public safety, we would not have a comprehensive program to address the many law enforcement needs of our community. For that reason, it is extremely important that the Department of Justice continues to fund the programs that support us in our efforts.

Office of Justice Programs: Last year, the Department of Justice again proposed bill language to provide for a 7% tribal set-aside for all discretionary OJP programs to address Indian country public safety and tribal criminal justice needs. This level of funding would provide \$81.3 million for tribal justice programs. Similar to last year, the Puyallup Tribe of Indians joins with the National Congress of American Indians (NCAI) and other tribes in urging Congress to include the 7% tribal set-aside in the FY 2014 bill language. This 7% set-aside is critical for tribes because it would provide a more flexible funding structure and would complement DOJ's Coordinated Tribal Assistance Solicitation (CTAS). The CTAS streamlined grant application process allows tribes to submit a single application for multiple purpose areas.

Puyallup's Tribal Justice Center. The Department of Justice program established to address detention facilities in Indian country has been historically underfunded. In a recent report, the Department of the Interior estimated that a \$8.4 billion need over the next ten years exists in order to bring tribal and Bureau of Indian Affairs (BIA) detention centers up

to current standards. To address this need, we request that—at a minimum—\$30 million be appropriated for the Department of Justice Detention Facilities Construction in Indian Country program for the construction of detention facilities and tribal justice centers.

The Tribe identified a need for a Tribal Justice Center to provide a comprehensive, holistic justice program where law enforcement, probation, court and detention could be housed in one location. This approach is consistent with DOJ and BIA efforts to coordinate agency programs to enhance program performance. To achieve this goal, the Puyallup Tribe initiated the design and construction of a 43,932 square foot “Justice Center” to be located on our reservation. The total construction cost of our Justice Center is estimated to be \$25.6 million. It will provide facilities for the delivery of judiciary services, including a 14,700 square foot adult corrections facility (28 beds), a 12,354 square foot law enforcement command center, and a 16,878 square foot Tribal court center. The Tribal court center will include courtrooms, judges’ chambers, court clerk, prosecution, probations and public defender.

We are building the project in phases in order to meet budgetary constraints. Phase I involves the initial construction of the corrections facility at a cost of \$9.6 million. The Tribe was successful in securing ARRA grants to partially fund the construction of the corrections facility; the remaining balance will be supplemented with Tribal funds to complete Phase I. Ground breaking will occur shortly and we anticipate construction to be completed by the end of the year.

Phase II will involve the construction of the law enforcement command center at a cost of \$7 million and Phase III will consist of the construction of the Tribal court center at a cost of \$9 million. The total cost of Phases II and III of the Justice Center is estimated to be \$16 million.

Office of Community Oriented Policing Services: The FY 2013 Budget request also included \$286 million for COPS programs, a \$91 million increase for hiring police officers and non-law enforcement personnel. The Tribe generally supported this request, but we noted that the demonstrated need for additional law enforcement personnel in Indian country alone is \$42 million—nearly three times more than the \$15 million specifically included for hiring tribal law enforcement officers. The Tribe requests that the FY 2014 bill language include \$42 million for additional law officers in Indian country to address this serious shortfall of law enforcement personnel.

The demand for law enforcement services will continue to increase as tribal governments continue to enhance civil and criminal justice administration. This is particularly true given the recent recognition by Congress in the reauthorization of the Violence Against Women Act of tribal jurisdiction over domestic and dating violence offenses, regardless of whether an offender is Indian.

As noted above, Puyallup is further impacted by the existing and growing “gang problem” within the boundaries of our reservation. Gang violence creates greater logistic problems for our Tribe than other reservations due to our urban setting, where we must interact with city, county, state and federal agencies. In an effort to combat gang activities, the Puyallup Tribal Council created a Gang Task Force within the Tribal Police Department. The Gang Task Force developed a gang policy that includes a four-prong approach: (1) enforcement; (2) intelligence; (3) education; and (4) physical-mental health. Currently, these programs are either being implemented or designed for use, with supplies and staff being provided by the Tribe. What is needed to move forward is federal funding in each pronged approach.

Furthermore, the FY 2013 Budget provided \$20 million for the COPS Tribal Resources Grant Program which allows tribes to purchase much needed equipment and supplies for community police services. While the Tribe was supportive of the increase of funds dedicated to necessary law enforcement resources, we noted that in fact \$40 million is needed to sufficiently fund the Tribal Resources Grant Program. If our Tribe is to live in safety and focus on health, education and economic development, our law enforcement officers must have the necessary equipment and resources to fulfill their responsibilities.

Office on Violence Against Women: In addition, the FY 2013 Budget requested \$412 million for the OVW, including \$500,000 for the Indian Country Sexual Assault Clearinghouse to provide training on the handling and prosecution of cases which involve domestic and dating violence against Native women. We supported these requests in the past and continue to do so today.

We also join with NCAI, other tribal governments, and Native women across this country in commending Congress and the Administration in the recent reauthorization of the Violence Against Women Act, and its recognition of the inherent authority of tribes to investigate and prosecute Indians and non-Indians who commit crimes of dating and domestic violence. We further request that FY 2014 bill language include funding for additional resources that tribal justice departments will need to exercise this inherent jurisdictional authority. This funding will be absolutely critical to the successful implementation of the law.

Sequestration: Finally, it is the Tribe’s sincere hope that the FY 2014 bill language remedy the drastic cuts to FY 2013 appropriations implemented under the sequester. As we have already stated, tribal justice programs have been historically underfunded—and this is in spite of the fact that the federal government maintains a sacred trust responsibility over Indian affairs. The across the board 5% cuts to already underfunded tribal programs will have devastating impacts on Indian country and reverse or delay tribal efforts, such as my Tribe’s, to improve our economies and the health and well-being of our members.

Mr. FATTAH. Thank you for your testimony. I am going to turn the proceedings over to my distinguished colleague.

Mr. CULBERSON. [Presiding] Thank you. Thank you, sir, for your testimony.

We have this vote going on so we are going to be rotating sort of back and forth. Appreciate it.

I just wanted to ask real quickly. Your police force, it looks like within the jurisdiction of Tacoma—

Mr. BEAN. Yes, sir.

Mr. CULBERSON [continuing]. Washington?

Mr. BEAN. Yes.

Mr. CULBERSON. In the—anyone that commits a crime within the reservation is—are they prosecuted under state and local law in Washington?

Mr. BEAN. Actually, yeah, we have agreements whereby our officers are deputized, cross-deputized with the county and city and any call—service call that is made whether it be native or non-native we are able to fully service the call. In the case of a non-native we will take them to the county jail and prosecute.

Mr. CULBERSON. The reservation itself is essentially a part of the municipality of Tacoma? Are you like—

Mr. BEAN. The city of Tacoma—our reservation encompasses the City of Tacoma as well as the City of Fife and Pierce County and—

Mr. CULBERSON. Okay.

Mr. BEAN [continuing]. Several other small cities.

Mr. CULBERSON. I am trying to get a handle on jurisdiction over criminal cases.

Mr. BEAN. With our natives? The jurisdiction lies within the tribe. Non-natives we take them to the county.

Mr. CULBERSON. Oh, okay.

Mr. BEAN. The county court for prosecution.

Mr. CULBERSON. Okay. And then the police department you say there is only two that are paid for with federal funds, two of the 29 are funded with federal money the other 27 are funded how?

Mr. BEAN. Out of our own tribal resources from our own tax revenues.

Mr. CULBERSON. Yeah. Collect a property tax I guess?

Mr. BEAN. Fuel tax, liquor tax, tobacco tax.

Mr. CULBERSON. Okay. Okay. And you have your own I guess court system too, kind of like basically you are your own independent local government; is that correct?

Mr. BEAN. We do have our own justice system, we have a correctional facility.

Mr. CULBERSON. Okay. And the federal government then only provides a thin slice of your funding. You are mostly supported with local revenue.

Mr. BEAN. Ten percent of your departmental cost for public safety is provided by the federal government, the other—

Mr. CULBERSON. Okay. Ten percent.

Mr. BEAN. Yes, sir.

Mr. CULBERSON. Okay. The only reason I ask is you know we are living on borrowed money. All the money we are spending today

you would literally shut down the entire federal government, and——

Mr. BEAN. Yes, sir.

Mr. CULBERSON [continuing]. Basically all but \$185 billion of all the revenue coming into the federal government goes to pay Social Security, Medicare, Medicaid, interest on the debt, and veterans' benefits. So we are living on money borrowed from our kids.

So anyway, thank you very, very much.

Mr. BEAN. Thank you.

Mr. CULBERSON. And we will do all we can obviously to protect funding for all these important programs, but we are facing hard times financially.

Thank you, sir.

Mr. BEAN. Thank you, sir.

Mr. CULBERSON. And thank you very much.

And next Jim Bueermann of the Police Foundation. Thank you very much.

THURSDAY, MARCH 21, 2013.

POLICE FOUNDATION

WITNESS

JIM BUEERMANN, PRESIDENT

Mr. BUEERMANN. Good morning, Mr. Culberson. Thank you for this opportunity to testify before your subcommittee today about the Police Foundation and the discipline of evidence-based policing.

As you mentioned my name is Jim Bueermann, and I am the president of the Police Foundation, America's oldest, non-partisan and non-profit police research organization.

We are based in Washington, and our mission is to advance policing through innovation and science.

I spent 33 years as a police officer in Redlands, California, the last 13 as the chief of police and director of housing, recreation, and senior services.

I was fortunate to lead a department deeply rooted in the use of the best available science to drive its policing strategies and thereby giving local taxpayers the highest possible return on their investment and public safety.

We experience great community support for this approach as well as national recognition for our use of evidence-based approaches to controlling crime and disorder.

In 1970 the leadership of the Ford Foundation, believing that the police needed to use rigorous science to become more effective in controlling crime and disorder, created the Police Foundation, and for more than 40 years we have produced some of the country's most important research to help police officers better protect their communities.

We have established and we refined the capacity to define, design, conduct, and evaluate controlled experiments in evaluation research to improve the quality of policing.

Our goals are twofold.

First we conduct rigorous scientific research that produces relevant results that can be directly applied to policing policy or practice.

Our research is designed to address the questions, challenges, and problems faced by contemporary policing agencies.

And second, we act as a translational agent to move existing research from theory into practice. We strive to translate the larger world of scientific research into actionable information for law enforcement leaders and policy makers as your subcommittee provides funding for law enforcement support and research programs in the Department of Justice.

My purpose today is to share with you some of our thinking on emerging national issues.

I am not here seeking funding for the Police Foundation, but I would like to extend an invitation to the members and staff of the subcommittee to use us as a resource as you develop and fund policing research programs in the future.

Decreases in local funding for public safety mean that local governments cannot support an ever increasing number of police officers or in many cases even maintain the status quo. Therefore police chiefs and sheriffs must shift their attention to more efficient and effective strategies generated from well-designed scientific examination of what works to control crime and disorder. That model is called evidence-based policing, and it represents the field's most powerful force for change.

Evidence-based policing offers a practical solution to the challenge of balancing public safety, available funds, and taxpayer expectations. It blends the science of controlling crime and disorder with the principles of community policing and problem solving. It helps communities focus on meaningful, achievable, and measurable public safety outcomes. And it can be implemented without straining budgets, disrupting police organizations, or offending community members, and it can help police departments strengthen their legitimacy with the communities they serve.

The following are just a few examples of the areas in which we believe greater police-related research is justified.

The role of the police in helping prevent mental health-related gun violence, policing on school campuses, police legitimacy, policing in prisoner reentry and drug courts, the role of the police in wrongful convictions, officer safety and wellness, preventable error in policing, the police use of unmanned aerial vehicles, mobile device technologies, and additive manufacturing in the use of so-called 3D printers.

As the subcommittee develops future legislation I urge you to investigate, promote, and enhance the use of evidence-based policing, research, and strategies.

Thank you for allowing me this opportunity to testify today about the foundation and how its work can leverage taxpayer investments to improve public safety outcomes.

And more importantly I thank you for your service to our great Nation.

[The information follows:]

Statement of

Chief Jim Bueermann (Ret.)

President

Police Foundation

Washington, D.C.

Before

House Appropriations Committee

Subcommittee on Commerce, Justice, Science and Related Agencies

March 21, 2013

Chairman Wolf and Ranking Member Fattah, and Members of the Subcommittee, thank you for the opportunity to testify before your Subcommittee today about the Police Foundation.

I am President of the Police Foundation, a national, non-partisan, non-profit organization headquartered here in Washington, D.C. dedicated to supporting innovation and improvement in policing through research, technical assistance, training, professional services, and communication programs. The purpose of the Foundation is to advance policing through innovation and science by helping law enforcement agencies be more efficient and effective in serving and protecting their communities

Unlike many organizations, we strive to conduct research for policing, not just on policing. This makes a profound difference in how we conduct and disseminate research. Our goals are two-fold. First, we conduct rigorous scientific research so that relevant results that can be directly applied to police policy or practice. Our research is designed to address the questions, challenges, and problems faced by contemporary law enforcement agencies. Second, we act as a translational agent to move existing research from theory into practice. We strive to translate the larger world of scientific research into actionable information for law enforcement agencies and policy makers across our nation.

I accepted the position as the Foundation's President in September 2012 after a 33 year career in the Police Department of Redlands, California where I was Chief of Police as well as Director of the City's Housing, Recreation, and Senior Services for 14 years. As Chief, I developed a holistic approach to community policing and problem solving that consolidated housing and recreational services into the Police Department, based on risk and protective factor research into adolescent problem prevention. This strategy was recognized as one of the country's 25 most innovative programs in 2000 by Harvard's Kennedy School's "Innovations in American Government".

Established by the Ford Foundation in 1970, the Police Foundation's mission is to bring leading scholars into a long-lasting, constructive partnership with law enforcement. When the Police Foundation began its work, social experimentation was not a well-established discipline, but rather a developing art. It was the Police Foundation, in cooperation with police departments all over the country, that engendered a questioning of the traditional models of professional law enforcement and the testing of new approaches to policing. The Foundation has established and refined the capacity to define, design, conduct, and evaluate controlled experiments and evaluation research to improve the delivery of police services, and provide more effective and efficient strategies. Since 1993, the Foundation has provided community policing research, training, and technical assistance to more than 1,000 law enforcement agencies and communities throughout the country.

As your Subcommittee provides both oversight of and funding for federal law enforcement programs in the Department of Justice, my purpose today is to share with you some of our thinking on emerging national issues. I am not here today seeking funding for the Police Foundation, but I would like to extend an invitation to the Members and staff of the Subcommittee to use us a resource as you develop and fund federal law enforcement programs in the future in the very constrained federal budget environment.

In February, the Police Foundation issued a press release on a Prevention Model for Mental Health-Related Gun Violence. In the wake of the unspeakable tragedy in Newtown, CT, and amid the complex ongoing political debate about the role of firearms in incidents of mass violence in America, the Police Foundation convened a distinguished group of experts from the law enforcement, science, mental

health, and policy arenas to focus on gun violence and its connection to mental illness. Drawing upon a multidisciplinary body of knowledge - which establishes the extreme difficulty in predicting a violent act - the expert group distilled existing research into a preliminary framework predicated on knowledge, partnerships and practice that combines prevention and intervention strategies to give communities and the police a path to preventing mental health-related shootings rather than simply responding to the scene of yet another tragedy. The group concluded that it is possible to construct a straightforward, practical model that can provide the police and the communities they serve with practical, no-to-low cost recommendations that can be quickly implemented.

While a national response is important and necessary, we can and should find ways to address mental health-related gun violence at the local level. The police, school officials, mental health specialists, parents, and community leaders need practical, evidence-based suggestions about the prevention of these tragedies. And they need them now. It is possible to leverage the taxpayers' investment in policing, mental health systems, and research into "what works" by giving the police three clear recommendations about preventing mental health-related gun violence. They are:

1. Police chiefs and sheriffs should use the bully pulpit afforded them to keep community focus on the need for mental health services and convene local service providers and community members to enhance knowledge about local needs, services, and the science of mental illness and gun violence;
2. The police should create local partnerships with mental health service providers, school officials, and appropriate community groups to develop a mental health crisis response capacity; and,
3. Police chiefs and sheriffs should adopt specific policies and practices that help reduce the availability of firearms to people in mental health crisis, institutionalize mental health training for their officers, and facilitate community-wide "mental health first aid" training for all community members.

We believe that federal grant programs to local law enforcement agencies should dovetail with this on-the-ground strategy.

Turning to the general topic of preventing and fighting crime, cities face a growing number of fiscal challenges, among them balancing the need to combat crime, be responsive to residents in communities, and wisely use taxpayer dollars. An October 2011 report released by the US Department of Justice's Office of Community Oriented Policing (COPS Office) demonstrated the tremendous changes local law enforcement agencies have undergone as a result of strained budgets in the current economy. The COPS Office found that an estimated 10,000-12,000 law enforcement officers and sheriff's deputies were laid off in 2011; that approximately 30,000 law enforcement jobs were unfilled; and that 53 percent of counties had fewer staff than they had in October 2010. Agencies reported changes in the delivery of law enforcement services, including not responding to motor vehicle thefts, burglar alarms and motor vehicle accidents that do not result in injuries; decreasing investigations of a variety of crimes, including property and white collar crimes; and reducing investments in technology, communications and officer training.

Decreases in funding for public safety mean that police departments cannot support an ever-increasing number of law enforcement officers — or, in many cases, even the status quo. Therefore, police officials must shift their attention to more efficient and effective strategies, generated from well-designed scientific examination of what works to control crime and disorder. That model is called evidence-based policing (EBP), and it represents the field's most powerful force for change. It is also an area of intense interest for the Police Foundation.

EBP leverages the country's investment in police and criminal justice research to help develop, implement and evaluate proactive crime-fighting strategies. It is an approach to controlling crime and disorder that promises to be more effective and less expensive than the traditional response-driven models, which cities can no longer afford. With fewer resources available, it simply does not make sense for the police to pursue crime control strategies that science has proven ineffective.

Evidence-based policing offers a practical solution to the need to balance public safety, community service needs, available funds and taxpayer expectations. It blends the science of controlling crime and disorder with the principles of community policing and problem solving. It helps communities focus on meaningful, achievable public safety outcomes without breaking their budgets. And it can be

implemented without adding law enforcement officers, disrupting police organizations or offending community members. It can also help police departments strengthen their legitimacy with the diverse communities they serve, and come up with more effective management strategies. One such example is our recent experiment on the length of officers' shifts that demonstrated that officers assigned to 10-hour shifts were more rested than those on 8 or 12-hour shifts, and worked significantly less overtime. This finding suggests an approach that can reduce costs and risks to the safety of officers and the residents in their communities.

Examples of emerging areas in need of policing research are the use of police Unmanned Ariel Vehicles (UAV's), commonly referred to as "drones," and "3D printers." Research into the police use of UAV's opens the door to needed dialogue on what is appropriate for the use of drones in law enforcement that would not pose undue threats to safety, would maximize the ability to appropriately identify crisis situations as they unfold, and conform to the privacy rights of individuals. 3D printers are devices that "print" a three dimensional object using a CAD/CAM design in a computer. Like any other technology, bad people can use it for bad purposes. The ability for a person to make a weapon at home using a personal computer printing device will beget a number of new challenges for law enforcement at all levels of government.

As the Subcommittee develops future legislation, I urge you to investigate, promote, and enhance the use of evidence-based policing research and strategies when the federal government provides funds to local law enforcement organizations and to promote sharing of evidence-based policy information, ideas, and successes between different communities and regions of the country.

I thank all the Members of the Subcommittee for allowing me this opportunity to testify today about the Foundation and how its work can leverage taxpayer investments to improve on-the-ground outcomes, and thank you for your service to our nation.

Mr. WOLF [presiding]. Thank you very much for your testimony.
Mr. BUEERMANN. Thank you.

Mr. WOLF. Gary——

Mr. CULBERSON. Can I ask——

Mr. WOLF. Sure. Go ahead. Go ahead.

Mr. CULBERSON. You are funded entirely with foundation grants.

Mr. BUEERMANN. And we have an endowment, the Ford Foundation's endowment so it keeps us running today.

Mr. CULBERSON. That is terrific. It is always marvelous to have someone come up, Mr. Chairman, that is not asking for federal money.

Thank you.

Mr. BUEERMANN. It is a pleasure. Thank you.

Mr. WOLF. It is unusual.

Gary Mills, American Federation of Government Employees. Your statements will appear in the record. Welcome.

THURSDAY, MARCH 21, 2013.

AMERICAN FEDERATION OF GOVERNMENT EMPLOYEES

WITNESS

GARY MILLS, NATIONAL LEGISLATIVE COORDINATOR, COUNCIL OF PRISON LOCALS C-33

Mr. MILLS. Good morning, Chairman Wolf, Congressman Culber-son, my name Gary Mills, I am the national legislative coordinator for the council of prisons locals, we are affiliated with the American Federation of Government Employees and we represent the correctional workers for the Federal Bureau of Prisons.

In February of this year the Bureau of Prisons realized our worst nightmare. We had a correctional officer who was killed in the line of duty at USP Canaan in Pennsylvania. It was Officer Eric Williams, 34 years old, and he was brutally stabbed to death by an inmate with a homemade weapon.

The Bureau of Prisons, the entire Bureau of Prisons family basically is heartbroken. It is literally like we lost a member of the family and it is hard to explain that. It is someone most of us never met, never would have met, but it hurts that bad. Along with that we have gained a newfound resolve to do whatever possible we can to try and prevent this from occurring again.

So on behalf of over the 36,000 federal correctional workers at the Bureau of Prisons we would ask the subcommittee to provide us \$7,007,272,000 in fiscal year 2014 funding for BOP salaries and expenses. That allows us to hire enough additional correctional workers to achieve a 95 percent staffing level at existing BOP-operated institutions.

This \$7 billion plus figure assumes a 2013 fiscal year funding level of \$6,820,217,000 and a \$187,055,000 increase in 2014.

We would also ask that the Bureau of Prisons salaries and expenses account be exempt from sequestration provisions of the 2011 Budget Control Act.

Our BOP expenses are effectively mandatory, not discretionary, and we would ask that the Bureau of Prisons be directed to expand its pilot program for pepper spray to be issued to all staff working

in all our 117 correctional facilities for routine carry, no more than any dare I say a mall cop. I have pepper spray when I jog, letter carriers carry it. We are asking it just solely for the protection of our officers inside the institutions.

Nearly 218,000 prison inmates are in the Bureau of Prisons today. That is up from 25,000 in 1980 and it rises. And 81 percent of all these inmates are confined in BOP operated institutions, 19 percent are in managed residential reentry centers and private prisons.

The number of federal correction workers that work in BOP-operated prisons however is failing to keep pace with the tremendous growth of prison inmate populations.

As of December 13, 2013, the BOP-operated institutions were staffed at an 88 percent level as contrasted with the 95 percent staffing levels in the mid 90s. This 88 percent staffing level is below the 90 percent staffing level that the BOP believes to be the minimum level for maintaining the safety and security of the Bureau of Prisons facilities.

At the same time prison inmate overcrowding is an increasing problem at BOP institutions despite the activation of new prisons over the past few years. BOP-operated institutions at the end of fiscal year 2011 were operating 39 percent above rated capacity overall with our high security facilities at about 55 percent overrated capacity.

And we would ask for the anomaly to—I am sorry—for exemption from sequestration because although we got an increase in the budget with sequestration we would actually lose money and we are still dealing with a rising tide of inmates coming into the system.

And lastly—I am sorry for my time—the pepper spray program is something that we have asked to be expanded. It was initially brought in for staff safety. All of our studies at the Bureau of Prisons conducted in the initial run of the pepper spray program showed significant lower rates in violence on inmate-on-inmate violence and inmate-on-staff violence.

There is a video that we had brought to the Hill last month that showed an actual very effective use of pepper spray in Seattle, FDC SeaTac, where an inmate had grabbed an iron and charged towards a staff member. He had pepper spray, sprayed it in the direction of the inmate, the inmate covered his face and ran past the staff member, as a result the inmate nor to staff member was injured.

I am sorry for my time. Thank you very much for this opportunity to testify.

[The information follows:]

**GARY MILLS
NATIONAL LEGISLATIVE COORDINATOR
COUNCIL OF PRISON LOCALS
AMERICAN FEDERATION OF GOVERNMENT EMPLOYEES
AFL-CIO**

Chairman Wolf, Ranking Member Fattah, and Members of the Subcommittee –

My name is Gary Mills. I am the National Legislative Coordinator of the Council of Prison Locals, American Federation of Government Employees, AFL-CIO. On behalf of the over 36,000 federal correctional workers who work at the 117 Federal Bureau of Prisons (BOP) correctional institutions, I strongly urge the House Appropriations Subcommittee on Commerce-Justice-Science (CJS) to:

- 1. Provide \$7,007,272,000 in FY 2014 funding for the BOP Salaries & Expenses account to allow BOP to hire enough additional correctional workers to achieve a 95% staffing level at existing BOP-operated institutions. This \$7,007,272,000 assumes a FY 2013 funding level of \$6,820,217,000 and then a \$187,055,000 increase in FY 2014.**
- 2. Exempt the BOP Salaries & Expenses account in from the sequestration provisions of the 2011 Budget Control Act because BOP expenses are effectively mandatory, not discretionary.**
- 3. Direct BOP to expand the pepper spray pilot project to include correctional workers who work in highly dangerous areas of all BOP prisons – allowing them to routinely carry pepper spray in case situations arise where they must defend themselves if physically attacked by dangerously violent inmates.**

DISCUSSION

The AFGE Council of Prison Locals strongly urges the House CJS Subcommittee to:

- 1. Provide \$7,007,272,000 in FY 2014 funding for the BOP Salaries & Expenses account to allow BOP to hire sufficient additional correctional workers to achieve a 95% staffing level at existing BOP-operated institutions. This \$7,007,272,000 assumes a FY 2013 funding level of \$6,820,217,000 and then a \$187,055,000 increase in FY 2014.**

Nearly 218,000 prison inmates are incarcerated in BOP correctional institutions today, up from 25,000 in FY1980, 58,000 in FY1990, and 145,000 in FY 2000. About 81% - or 176,050 - of the inmate population are confined in BOP-operated institutions while 19% - or 41,697 - are managed in residential reentry centers and private prisons. By the end

of FY 2014, it is expected there will be 229,268 prison inmate incarcerated in BOP correctional institutions.

This explosion in the federal prison inmate population is the direct result of Congress approving stricter anti-drug enforcement laws involving mandatory minimum sentences in the 1980s, as documented in the *History of Mandatory Minimums*, a study produced by the Families Against Mandatory Minimums (FAMM).

The number of federal correctional workers who work in BOP-operated prisons, however, is failing to keep pace with this tremendous growth in the prison inmate populations. As of December 31, 2011, the BOP-operated institutions were staffed at an 88% level (36,172 of 41,104 authorized positions filled), as contrasted with the 95% staffing levels in the mid-1990s. This 88% staffing level is *below* the 90% staffing level that BOP believes to be the minimum level for maintaining the safety and security of BOP prisons.

In addition, while the number of prison inmates in the 117 BOP-operated institutions has grown from 125,560 in FY 2000 to 176,005 prison inmates now, the number of BOP correctional workers has only increased from 30,382 in FY 2000 to 36,172 now. As a result, the BOP inmate-to-worker ratio has increased from 4.13 to 1 in FY 2000 to 4.96 to 1 now. This significant increase in the inmate-to-worker ratio adversely impacts BOP's ability to effectively supervise prison inmates and provide inmate programs.

At the same time, prison inmate overcrowding is an increasing problem at BOP institutions despite the activation of new prisons over the past few years. BOP-operated institutions at the end of FY 2011 were operating at 39% above rated capacity, with 55% overcrowding at high security prisons and 51% at medium security prisons. By the end of FY 2013, it is estimated the BOP system will be overcrowded by 43%.

These serious correctional worker understaffing and prison inmate overcrowding problems are resulting in significant increases in prison inmate assaults against correctional workers. Hundreds of inmate-on-worker assaults have occurred at various BOP prisons over the past several years. The brutal stabbing murder of Correctional Officer Eric Williams on February 25, 2013, by a prison inmate at USP Canaan (PA) illustrates that painful reality.

Assumption: \$6,820,217,000 in FY 2013 CJS Appropriations for BOP Salaries & Expenses account to hire 1,667 additional correctional workers, thereby attaining a 90.3% staff level

Despite the fact that Congress has yet to finalize the FY 2013 CJS appropriations bill, it is reasonable to assume that the final FY 2013 funding level will be \$6,820,217,000 for the BOP Salaries & Expenses account – a \$268,936,000 increase above FY 2012. This

assumption is based on the fact that \$268,936,000 was proposed by the Obama Administration FY 2013 Budget; provided in H.R. 5326, the House-passed FY 2013 CJS appropriations bill; and recommended by the Senate Appropriations Committee in both S.2323, the Senate FY 2013 CJS appropriations bill, and the Senate version of H.R. 933, The Continuing Appropriations Act of FY 2013.

According to the Department of Justice's FY 2013 Congressional Budget Submission, the President proposed the \$268,936,000 increase to help fund 37,839 correctional workers and 41,904 authorized positions – an increase of 1,667 correctional workers and 800 authorized positions – for a 90.3% staffing level. (As noted above, BOP considers this to be the staffing level minimum for maintaining the safety and security of BOP institutions.)

Request: \$7,007,272,000 in FY 2014 CJS Appropriations for BOP Salaries & Expenses account to hire 1,969 additional correctional workers, thereby attaining a 95% staffing level at existing BOP-operated institutions.

The AFGE Council of Prison Locals is hopeful that the President and Congress will agree to provide \$6,820,217,000 in FY 2013 funding so that BOP can achieve the minimum staffing level – or 90% - to help foster the safety and security of BOP-operated institutions. However, years of chronic underfunding of the Salaries and Expenses account has forced BOP to rely excessively on correctional officer overtime and the diversion of program staff instead of hiring sufficient additional correctional officers – leaving the workforce spread dangerously thin and compromising BOP's ability to operate in a safe and efficient manner.

And so, AFGE strongly urges the House CJS Appropriations Subcommittee to provide an \$187,055,000 increase in FY 2014 funding above the assumed \$6,820,217,000, the FY 2013 funding level for the BOP Salaries and Expenses account to allow BOP to hire an additional 1,969 correctional workers in FY 2013, thereby achieving a 95% base staffing level at existing BOP-operated institutions

2. Exempt the BOP Salaries & Expenses account in both FY 2013 and FY 2014 CJS Appropriations measures from the sequestration provisions of the 2011 Budget Control Act because BOP expenses are effectively mandatory, not discretionary.

The sequestration cuts will adversely affect funding for the BOP Salaries & Expenses account in both FY 2013 and FY 2014.

For example, in FY 2013 Section 1305 of the House-passed *Full-Year Continuing Appropriations Act for FY 2013 (H.R. 933)* provides \$6,689,481,000 for the BOP Salaries & Expenses account, an "anomaly" increase of \$138,200,000 above the

enacted FY 2012 funding level. The House Appropriations Committee summary of H.R. 933 explains that this increase is necessary "to ensure the safe and secure operations of Federal Prisons."

However, House CJS subcommittee staffers have informed us that this anomaly – despite its obvious necessity – is not exempt from the FY 2013 sequestration. The February 13, 2013 "Report on Sequestration" by the House Appropriations Committee Democrats states that: "The Federal Bureau of Prisons would be cut by \$335 million, necessitating an average furlough of 12 days for all its personnel. This would be equivalent to the loss of five percent of BOP's staff, including 1,300 correctional officers." (Please note: The sequestration cut would be slightly higher - \$341 million – if one makes the reasonable assumption that \$6,820,217,000 would be the final FY 2013 funding level.)

And in FY 2014, the sequestration will cut – albeit somewhat differently - the \$7,007,272,000 for the BOP Salaries & Expenses account. The *Budget Control Act* requires that the sequestration of discretionary programs be implemented up front through reductions in the defense and non-defense in the defense and non-defense discretionary caps themselves.

The AFGE Council of Prison Locals believes the BOP Salaries & Expenses account should be exempt from the both the FY 2013 and FY 2014 sequestrations because BOP expenses are effectively mandatory, not discretionary. As the Senate Appropriations Committee report on FY 2013 CJS appropriations (Senate Report 112-158) explains:

"By law, the BOP must accept and provide for all Federal inmates, including but not limited to inmate care, custodial staff, contract beds, food and medical costs. The BOP cannot control the number of inmates sentenced to prison, and, unlike other Federal agencies, cannot limit assigned workloads and thereby control operating costs. In effect, the BOP's expenses are mandatory, which leaves the Bureau with extremely limited flexibility."

3. Direct BOP to expand the pepper spray pilot project to include correctional workers who work in highly dangerous areas of all BOP prisons – allowing them to routinely carry pepper spray in case situations arise where they must defend themselves if physically attacked by dangerously violent inmates.

On June 5, 2012, BOP announced that the agency had decided to conduct a one-year pilot program at seven U.S. penitentiaries (USP Coleman I (FL), USP Coleman II (FL), USP Florence (CO), USP Lee County (VA), USP Lewisburg (PA), USP Pollock (LA), and USP Atwater (CA)) to determine if allowing correctional staff to routinely carry

oleoresin capsicum spray – commonly known as “pepper spray” – while on duty will improve the safety of correctional staff, prison inmates, and others.

On February 28, 2013 - three days after the savage murder of Correctional Officer Eric Williams by a prison inmate at USP Canaan (PA) – BOP announced that as a part of a Partnership Council Initiative with the AFGE Council of Prison Locals, the agency is expanding this pilot to include all high security institutions. The implementation of this expanded pilot will occur in two phases. Phase one will include USP Allenwood (PA), USP Big Sandy (KY), USP Canaan (PA), ADX Florence (CO), USP Hazelton (WV), and USP McCreary (KY), and phase two will include USP Beaumont (TX), USP Terre Haute (IN), USP Tucson (AZ), and USP Victorville (CA).

The AFGE Council of Prison Locals is pleased that BOP decided to conduct – and then expand – this pepper spray pilot program. But we believe that the pilot project should be expanded even more to include correctional staff who work in highly dangerous areas *in all BOP prisons* – allowing them to routinely carry pepper spray in case situations arise where they must protect themselves if physically attacked by violent prison inmates.

For several years, AFGE has been urging BOP to institute a new pepper spray policy that would allow federal correctional officers who work in highly dangerous housing units and other high security areas of all BOP prisons to routinely carry pepper spray in case situations arise where they must defend themselves if physically attacked by dangerously violent inmates.

Under current BOP policy, federal correctional officers are not allowed to routinely carry pepper spray in BOP prisons. Instead, prison wardens (or designated officials) must authorize pepper spray utilization before correctional officers can use it to quell an emergency situation. Pepper spray is stored in specific locations throughout the prisons, such as in secure control rooms, watchtowers in the prisons’ yards, or in the prisons’ armories outside the secure perimeter.

The problem, however, is that in situations where aggressively dangerous inmates, who often have home-made lethal weapons, are physically attacking correctional officers, there is little or no time for the warden to authorize the use of pepper spray and get it to the endangered officers so they can protect themselves. The correctional officers are left to defend themselves with the two things they are authorized to carry: keys and a walkie-talkie radio.

This concludes my statement. I thank you for your attention and will be happy to answer any of your questions.

Mr. WOLF. Thank you for your testimony, it is very powerful. We did approve reprogramming the other day for the Bureau of Prisons.

Secondly, and Mr. Fattah and I are going to put in a bill for a national commission looking at the whole prison system.

And on the pepper spray we will certainly take a look at it. Congressman Morgan Griffith has raised that issue with me, so what we will do is together we will call the Bureau of Prisons up together and we will talk to them.

So we will—

Mr. MILLS. Greatly, greatly appreciated. Thank you so much.

Mr. FATTAH. Thank you for your testimony.

Mr. MILLS. Thank you, sir.

Mr. WOLF. All right, next Davis Hansberger of Midwest Trade Adjustment Assistance Center.

THURSDAY, MARCH 21, 2013.

MIDWEST TRADE ADJUSTMENT ASSISTANCE CENTER

WITNESS

DAVID HANSBERGER, EXECUTIVE DIRECTOR

Mr. HANSBERGER. Thank you, Mr. Chairman for the opportunity to testify before this committee, and thank you, Mr. Fattah, regarding appropriations for the TAA for firms program administered by EDA at the U.S. Department of Commerce.

On behalf of thousands of small—is that on now? Okay. On behalf of small—thousands of small American manufacturers I want to thank you and the members of this committee for your past support of this critical program.

My name is David Hansberger and I started working with the TAA for firms program in 1988, and since 2008 I have been the director of the Midwest Trade Adjustment Assistance Center.

We respectfully request that Congress continue to appropriate \$16 million in fiscal year 2014 for the TAA for firms program.

Despite the small budget the program delivers a big impact and I would like to illustrate that with my remarks in three areas today.

History, operations, and successes.

The TAA for firms is focused on small to medium sized manufacturing companies that lost significant numbers of customers and sales due to lower priced imports, but these companies have not closed down, they have not moved their manufacturing overseas, they are staying in the U.S. communities and fighting for business.

The TAA for firms helps these manufacturers to train workers, improve productivity, grow domestic, and export sales.

Operationally program staff works with each individual company to establish their eligibility and then write a specialized business plan that looks at strengths, weaknesses, threats, and opportunities, and then specific projects are detailed and then implemented by independent private sector consultants and service providers, with the manufacturing firm paying half the bill and the program paying half the bill.

This operational structure makes sure that the projects are carefully designed, reviewed, prioritized, and focused to deliver a positive and cost effective result.

And the manufacturing companies have their own skin in the game because they have to pay half the bill too.

Projects we cost share with our clients cover a wide range of needs and are all focused on expanding their customer base, growing sales, and making their product more efficiently.

Examples of these projects include achieving recognized quality standards like ISO 9000, developing new products, updating websites for e-commerce, export development, and on and on.

Firms adjust and generally leave the program within three to five years and the success has been very real.

The success is documented by both a recent GAO study of performance and an Inspector General study of cost effectiveness.

The IG found that the program has a very low overhead with 82 percent of funds going to serve and benefit manufacturers, and GAO determined that companies in the program demonstrated a five percent growth in sales.

Now, these companies turned around after a decline of 18 percent in sales to that 5 percent growth, and GAO also found there is a statistical significance between participating in the program and making that turn around.

This growth can be found in companies such as an Illinois die caster that has been rewarded the Precision Metal Forming Association training award and the Hitachi Pioneer award, both related to projects through the TAA for firms program, or a Pennsylvania company from the first district that makes industrial and scientific measuring equipment and worked with the program to update their website and attract more sales.

So what we have here is a program that targets small manufacturers that were losing sales and shedding employees and turns them around into sales and employment growth within a few years at low cost.

We hope TAA for firms will be viewed by Congress as separate and distinct from other trade adjustment assistance programs. The results are strong enough to stand independently in any format that Congress should see fit to define the program.

TAA for firms is the model of a cost effective, flexible, and effective program that could work well or better on a broader scope.

The consistent message is that the program works to grow small manufacturers in a cost effective way.

While many are talking about the need to support small business, grow exports, and support manufacturing jobs, here is a program that does all three, and it does it in a cost effective model that is time tested and works well.

Your support for level funding will certainly allow this work to continue and achieve the successful trends that are documented.

Thank you very much for your time and attention and the opportunity to summarize this small but important program. I would be happy to answer any questions.

[The information follows:]

TESTIMONY OF
DAVID R. HANSBERGER
DIRECTOR OF MIDWEST TRADE ADJUSTMENT ASSISTANCE CENTER
BEFORE THE
UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE
AND RELATED AGENCIES
MARCH 21, 2013

Thank you, Mr. Chairman, for the opportunity to testify before this committee regarding appropriations for the Trade Adjustment Assistance for Firms (TAAF) program administered by the Economic Development Administration at the U. S. Department of Commerce. On behalf of thousands of small American manufacturers, I want to thank you, and the members of this Committee, for your past support of this critical program. My name is David Hansberger, and I started working with the TAAF program in 1988, and since 2008 I have been the Director of the MidWest Trade Adjustment Assistance Center. I also serve as a member of the Board of Directors of the American Business Council, Inc. a 501(c)(6) organization dedicated to promoting free and open global trade for American manufacturers. We respectfully request that Congress continue to appropriate \$16 Million in Fiscal Year 2014 for the Trade Adjustment Assistance for Firms program. Despite the small budget, TAA for Firms delivers a big impact. I would like to focus my remarks on three areas: History, Operations, and Successes.

Trade Adjustment Assistance for Firms was created in the Trade Act of 1974, and was expected to be needed for a temporary period of five years. As you may have noticed, import competition has continued to be a concern for this country ever since 1974, and Congress in your wisdom has continued the TAA for Firms program through today. The TAA for Firms program differs significantly from the TAA for Dislocated Workers program administered at the Department of Labor, with much tighter requirements for entry, and a requirement of 1/60th fewer dollars. The intention of the program is to connect with small-to-medium sized manufacturing firms that have lost significant numbers of customers and sales due to lower priced imports, but which have not closed down, or moved their manufacturing overseas. These are companies that are staying in American communities and fighting for business. TAA for Firms helps these manufacturers train workers, improve productivity, and grow domestic and export sales. Congress should be proud of its creation.

Operationally, the MidWest TAAC is a private, non-profit consulting firm, one of 11 such centers that contract with the Economic Development Administration (EDA) to manage TAA

for Firms throughout the country. My office serves manufacturers in Illinois, Iowa, Minnesota and Wisconsin, and our task is to identify eligible firms that manufacture or provide related services, and which have been hurt by import competition.

TAA for Firms operates by providing cost-shared assistance to implement specific consulting and technical service projects that are designed to improve the company's competitiveness, move them forward, and help them grow, thus maintaining and creating jobs. Each of the individual TAACs works with their manufacturing firm clients to establish their eligibility, and then to write a specialized business plan that looks at strengths, weaknesses, threats, and opportunities. Specific projects are then detailed to address the weaknesses, build upon the strengths, guard against threats, and take advantage of opportunities. These projects are implemented by independent, private sector consultants and service providers, with the manufacturing firm paying half the bill, and the federal program paying half the bill. This structure makes sure that the projects are carefully designed, reviewed, prioritized, and focused to deliver positive and cost-effective results. And the manufacturing companies have their own "skin in the game" because they have to pay half the bill, too. With our key involvement, and the engagement of the manufacturing company in its project creation, the program is able to focus projects on what is needed now, not what was the hot topic 5 years ago. The training that is provided is done at the highly customize, granular level, and is tied to real jobs and current needs. This is a critical point. When TAA for Firms and the company spend any money on job training, it is done so to preserve an existing job or create a next generation job in the company. The training cost is attached to an immediate job need and skill set... not training for skills that may not be required in the workforce. This process has proven to work very well, with companies turning from declines in sales and employment to growth and success.

The projects we cost-share with our clients cover a wide range of needs, and are all focused on expanding their customer base, serving customers better, and making their product more efficiently. Examples of these projects include achieving recognized quality standards like ISO 9000, developing new products, updating websites to reach more customers and provide information on the new quality registration and new products, adjusting work flow for higher throughput, improving distribution and marketing, improving financial management, training workers on new equipment and procedures, export development, and on and on. Because of limited funding in the program we try to complete, on average, one project per year with each client in the program. We average about \$30,000 cost on each project. On average, firms adjust and generally leave the program within 3 to 5 years. The success has been very real.

The success of the TAA for Firms program is documented by both a recent General Accounting Office study of performance, and an Inspector General's study of cost effectiveness. While the IG found that the program has a very low overhead, with 82% of funds going to serve and benefit the manufacturers, the GAO determined that the companies have demonstrated growth of 5% in sales. Not only did the companies turn from a decline of close to 18% in sales before they entered the TAA for Firms program, but GAO found that there was statistical significance between participating in the program and making the turnaround. This growth can be found in manufacturers that are working with the program, such as a Pennsylvania sports apparel company that has hired 25 new workers directly related to TAA projects. Or an Illinois die caster that has been awarded the Precision Metalforming Association Training Award, and The

Hitachi Pioneer Award, both related to projects through the TAA for Firms program. Or the Pennsylvania company from the 1st District that makes industrial and scientific measuring equipment that worked with the program to update their website and attract more sales, and ended up attracting a healthy buyer for the whole company.

So what we have here is a program that targets small manufacturers that are already losing sales and shedding employees, and turning that around into sales and employment growth within a few years, at low cost. It doesn't require years of trade investigations; it doesn't require that the government develop the answers; and it doesn't require the application of outdated training or operational models.

TAA for Firms is a unique federal initiative focused exclusively on small-to-medium sized companies. In the Midwest, our smallest client is about \$500,000 in sales, our largest is \$500 million, and our average client has 85 employees and \$18 Million in sales. On the national level, the average size parameters are very similar. At the end of 2012, our 890 active clients nationally demonstrated an increase in sales since they entered the program of 25.8%, and an increase in employment of 6.6%. This is in comparison to the BLS data for manufacturing employment showing a 14.4% decline in jobs over the past 6 years.

Some success stories of individual companies work with the TAA for Firms program can provide more understanding.

EXAMPLE 1 -A Wisconsin manufacturer of custom solenoids was experiencing tough competition from Asian importers in the automotive, recreational vehicle, motorcycle and industrial application markets. Several key customers moved their purchases to overseas providers with cheaper prices, resulting in a 21% decline in sales, forcing the company to lay off workers. The company was Certified into the Trade Adjustment Assistance for Firms program in June 2010. The manufacturer was able to enhance marketing tools with two projects in late 2010 that helped attract new domestic and international customers. In addition, the firm was able to cost-share export development assistance early in 2012, including research and marketing material translation. As a result of utilizing the Trade Adjustment Assistance for Firms Program, the manufacturer's exports have grown dramatically, with sales up \$5 million and employment up 27 workers since they entered the program.

EXAMPLE 2 -A Virginia company that all the experts say shouldn't be able to survive in America was experiencing heavy competition from imports. The company makes leather shoes, and had experienced what all shoe companies had seen. Sales were down 69%, employment down 17% and profits were only a memory. The company began working with the Mid-Atlantic Trade Adjustment Assistance Center, and focused on five major projects: E-commerce to generate revenue, new product development and new website development for longer term growth, RFID system implementation for cost control, and Six-sigma consulting for improved operations and quality. Since they entered the TAA for Firms program, the company has not only survived as one of the few leather shoe manufacturers in the country, but they have seen a 97% increase in sales, and a 22% increase in employees.

EXAMPLE 3—An integrated metals manufacturer in the 1st District of Maryland has worked on 7 small projects through the Trade Adjustment Assistance program after documenting import impact and declining sales and employment. Projects have focused on improving quality procedures, systems, and registration, including Certification to the ISO 9001:2008 standard. This has allowed the company to pursue sales as a defense subcontractor, and attract new private sector customers as well. Since beginning work with the program, the company has achieved their first profitable year since 2006, and has shown gains in productivity and return on human capital.

EXAMPLE 4—A conveyor manufacturing company from the 10th District of Virginia experienced significant import impact, with a 34% sales decrease and an employment decline of 12%. The company was able to show eligibility and enter the Trade Adjustment Assistance for Firms program, and began to implement 10 small projects over a period of 3 years. The company implemented Lean Manufacturing, updated their website and marketing materials, conducted employee training, and reached new customers through an updated trade show design. These projects were all cost-shared with 50% of the funds coming from the TAA for Firms program, and 50% paid by the company itself. The results were very good, with a 109% sales increase, and a 21% increase in employment. The industry noticed the improvement, and a competitor decided to buy the company for their significant and continued growth potential.

In the future, we hope TAA for Firms will be viewed by Congress as separate and distinct from other Trade Adjustment Assistance programs. We feel that the program results are strong enough to stand independently, in any format that Congress should see fit to redefine the program. TAA for Firms is the model of a low-cost and flexible program that provides modest seed money allowing companies to reverse declining trends and gain stability toward robust growth.

TAA for Firms should not be lumped with the Dislocated Workers program because the Firms program is saving jobs, and allowing thousands of workers to hold onto their jobs so that they never require dislocated support and services. Our price tag for saving jobs is exponentially less than the Billions used to adjust workers who lose jobs due to company closures, downsizing, and outsourcing. We hope Congress will review this program's authority and funding as a separate, distinct, and proven successful remedy for trade inequities and community development.

Whether you measure the TAA for Firms program by the success stories of individual companies, or the data compiled by the national network of TAACs, or the independent reviews of the GAO and the IG, the consistent message is that the program works to grow small manufacturers in a cost effective way. While many are talking about the need to support small businesses, grow exports, and support manufacturing jobs, here is a program that does all three, and delivers cost-effective growth in an existing, tested model.

The TAA for Firms program continues to be an effective model for integrating, combining, or expanding efforts to grow manufacturing, deliver worker training, and expand exports now and in the future. Your support for an appropriation of \$16 Million in FY'14 will certainly allow this work to continue and achieve the trends we see in this sector of American manufacturing thanks to the TAA for Firms program. Thank you very much for your time and attention, and the opportunity to summarize this small, but important program. I would be happy to answer any questions.

Mr. WOLF. Thank you very much, I appreciate your testimony.
Mr. Fattah.

Mr. FATTAH. I appreciate the program and your work and thank you very much.

Mr. HANSBERGER. Thank you.

Mr. WOLF. Thank you.

Joe McKinney with the National Association of Development Organizations. Welcome.

THURSDAY, MARCH 21, 2013.

NATIONAL ASSOCIATION OF DEVELOPMENT ORGANIZATIONS

WITNESS

JOE MCKINNEY, EXECUTIVE DIRECTOR

Mr. MCKINNEY. Thank you.

Mr. WOLF. Your full statement will appear in the record.

Mr. MCKINNEY. Thank you.

Chairman Wolf, ranking Member Fattah, thank you for taking time particularly on this hectic day to allow me to testify on the importance of including \$257.5 million in funding for the U.S. Economic Development Administration for fiscal year 2014.

My name is Joe McKinney and I am the executive director of the National Association of Development Organizations. We represent over 400 regional development organizations across the country.

I am hear to speak to you today about the importance of EDA particularly in rural America.

As the overall U.S. economy has struggled to recover from the great recession areas served by our members are particularly—have felt acute impact. In these communities the loss of a relatively few number of jobs can have a devastating effect.

I am well aware of the financial constraints faced by this subcommittee, the needs of all the agencies covered by your bill have important roles to play, and all are faced with the ongoing budgetary pressure.

As you mentioned earlier today absent a grand bargain that comprehensively addresses tax in a time of reform I feel that domestic discretionary spending will continue to bear the brunt of debt reduction.

While NADO was disappointed with the EDA's budget and proposed continuing resolution I believe EDA has demonstrated real results and that the agency can clearly show the benefits returning to the fiscal year 2012 funding level.

Let me briefly discuss what makes EDA unique.

As you know EDA is the only federal agency with the sole mission of fostering economic growth and creating high quality jobs.

Planning grants are used to ensure a community has the necessary resources to attract new businesses, and the infrastructure grants ensure that new businesses have the primary public services needed to locate and expand.

The economic development districts have conducted hundreds of successful projects and regions all across the nation.

My complete statement has some of the examples of successful EDA grants and I urge members of the subcommittee to read that.

I also want to share with you the critical importance of insuring that EDA's resources are focused on the programs used most often and most effectively by EDDs across the country.

EDDs primary benefit from planning and infrastructure grants. Rural regions must rely on assistance from EDA to help provide the building blocks to spur economic growth, and we believe EDA grants should remain competitive and accessible to all rural regions without regard to population and unattainable match requirements.

Funding opportunity should never be placed out of reach of communities that most desperately need assistance.

In conclusion EDA grants have a critically important role in the lives of rural Americans. Without EDA grants these localities simply wouldn't be able to afford to provide basic planning services and infrastructure necessary to maintain a thriving community.

The \$36 million difference in EDA grants from fiscal year 2012 budget to the proposed CR represent precious resources to rural America.

As I mentioned earlier, these days every resource is precious for sure.

My goal today has been to show how these additional funds for EDA will have a substantial impact on hundreds of small and rural communities across the Nation.

The committee's report last year acknowledged that EDA has shifted away from traditional planning and infrastructure grants. NADO could not agree more with that statement.

I firmly believe that if EDA continues its historic focus on economic planning and infrastructure grants rural communities and small cities will be able to leverage these grants and insure that today's generation of new workers do not have to relocate to find a good job.

We look forward to working with you in the future and I thank you for the opportunity again to speak with you today and I would be happy to answer any questions.

[The information follows:]



**Official Written Testimony for programs under the Economic Development Administration (EDA)
for Fiscal Year 2014**

Submitted To

Subcommittee on Commerce, Justice, Science and Related Agencies

Committee on Appropriations

United States House of Representatives

Washington, DC

Submitted By

National Association of Development Organizations

Joe McKinney, Executive Director

March 21, 2013

Chairman Wolf, Ranking Member Fattah and members of the Subcommittee, thank you for the opportunity to testify today about the importance of including \$257.5 million in funding for the U.S. Economic Development Administration (EDA) for Fiscal Year 2014. My name is Joe McKinney and I am the Executive Director of the National Association of Development Organizations (NADO). I plan to discuss three core issues today:

1. What makes EDA unique among the federal portfolio of economic development programs
2. The impact EDA grants have on rural communities and small metropolitan regions and
3. The importance of EDA maintaining its focus on planning and infrastructure grants

My professional background includes more than two decades in local and regional economic development. I have served as a County Manager in several small and rural communities as well as the Executive Director of the Land-of-Sky Regional Council in Asheville, North Carolina. In that capacity, I worked extensively with EDA and experienced firsthand the benefits that rural communities receive from EDA's planning and infrastructure grants.

I very much appreciate the opportunity to speak to you today about the important function that EDA grants serve across rural America, especially in distressed communities. As the overall U.S. economy has struggled to recover from the Great Recession, areas served by NADO members have often felt a more acute impact, as rural communities lose a higher percentage of jobs if a primary employer goes out of business. In these communities, the loss of a relatively small number of jobs can have a devastating effect.

I am well aware of the budgetary and financial constraints faced by this Subcommittee. The needs of all the agencies covered by your FY 2014 bill have important roles to play and all are

faced with ongoing budgetary pressure. Absent a “Grand Bargain” that comprehensively addresses tax and entitlement reform, I fear that the domestic discretionary account will bear the brunt of debt reduction.

Yet with the resources available, I believe EDA can demonstrate real results with the funds Congress has made available and the agency can demonstrate the benefit of returning to the FY 2012 funding level. I want to take a few minutes of your time today to discuss the impacts that would be felt in rural communities if the subcommittee provides \$257.5 million in FY 2014.

First, I would like to start by discussing what makes the U.S. Economic Development Administration (EDA) unique among the portfolio of federal economic development programs. The flexibility, partnership structure and accountability of EDA’s programs are exceptional within the federal system.

As the Subcommittee knows, EDA is the only federal agency with the sole mission of fostering economic growth and creating high quality jobs in the United States through strategic planning and investments. It is clear that EDA offers the best platform for accelerating economic growth in rural America.

Through its network of regional and local partners, EDA helps distressed communities and regions identify and address their needs, challenges and assets. EDA matching funds serve as a catalyst for change, whether through feasibility studies at the front-end of business development projects, financing that completes larger funding packages or for basic infrastructure that private industry expects local communities to provide.

Grants funded by EDA help rural communities and small cities prepare for the jobs of the future. Planning grants are used to ensure a community has the necessary resources to attract new industries and the infrastructure grants ensure that new businesses have the public services needed to locate and expand.

Second, I want to highlight the real impacts EDA grants have on rural communities and small metropolitan areas.

The economic benefit of EDA grants is easy to demonstrate. According to an independent analysis conducted by Grant Thornton and ASR Analytics in 2008, EDA’s public works program has a significant impact on employment levels in communities where EDA investments are made. The researchers found that EDA generates “between 2.2 and 5.0 jobs per \$10,000 in incremental EDA funding, at a cost per job of between \$2,001 and \$4,611.” These findings mirror an exhaustive national study of EDA’s public works and economic adjustment assistance programs by Rutgers University and a consortium of researchers in 1998 which found that

EDA's job creation and private sector leveraging ratios are highly cost effective and rank at the very top of any public economic development agency.

It is critically important to understand that the relatively small grants given by EDA to rural communities have a disproportionately large impact. A planning grant for \$60,000 can help a rural county or small town examine the needs of their community and determine what assets are needed to produce economic growth. Again, a relatively small infrastructure grant up to \$1 million to build a new road or extend water and sewer services to a new industrial park have impacts far greater than the same dollar amount would have in an urban area. Let me share just a few examples from NADO members.

In Missouri, EDA played an instrumental partnership role with an Economic Development District (EDD) and numerous other entities in assisting a small aluminum smelter, Bodine Aluminum, pursue new business opportunities. The company needed a new location to place a spin-off business that would utilize a new vacuum aluminum smelting technique. In leveraging EDA's public works assistance with other public sector resources and significant private sector investment, the new business was established in Troy, Missouri. Since then, the company has become part of Toyota North America and manufactures engine components for Toyota assembly plants across the country. Through limited seed capital by EDA, the company has created 850 local well-paying jobs in this small town and now offers multiple opportunities for additional spin offs and development.

Great Falls, Montana, a small city of approximately 55,000, has had numerous successes with EDA grants. A revolving loan fund (RLF) with seed capital from EDA has been used to attract numerous businesses to northern Montana. National Electronic Warranty renovated a historic building in downtown Great Falls and created 685 new jobs. AvMax used RLF funds to overhaul an airline facility, which currently employs 109 people. Centene built a Medicaid claims center that employs 278 people and Pasta Montana built a food processing center that employs 75 people.

In just one community of 55,000, an RLF funded by EDA has helped businesses create nearly 1,150 jobs. In a small city, the addition of over 1,000 jobs breathes new life into the economy, expands the tax base and makes the location primed for further economic expansion.

These types of successes are produced on a daily basis by EDDs across the country. While I understand that challenging economic times have placed strain on your Subcommittee's allocation for several years, I want to stress the benefits from increasing EDA's budget to the FY 2012 level. An increase of \$36 million for programmatic grants would provide for approximately 600 planning grants, based on an average grant of \$60,000. It would provide 36 additional large public works projects of \$1 million each. It can provide an additional 360

economic adjustment grants at an average of \$100,000 to help communities that have seen industries close or relocate overseas prepare the ground for the businesses of the future.

I do not want to diminish the importance of others who have testified before you today about the benefits of certain agencies or programs. I simply list these facts to demonstrate that the FY 2012 funding level for EDA would have an enormous impact across hundreds of small and rural communities.

Third, I want to share with you the critical importance of ensuring that EDA's resources are focused on the programs used most often and most effectively by EDDs across the country.

The Economic Development Administration was founded with the purpose of providing resources for rural communities to plan for and build the infrastructure necessary to promote economic growth. As such, the EDDs that have partnered with EDA over the past 40 years primarily benefit from planning and infrastructure grants. These grants are tailored for EDDs based on the characteristics of the regions they serve.

As I stated earlier, the primary purpose in the creation of EDA was to provide the resources to help leverage private investment in distressed communities. While it is important to examine new opportunities for investment, it is essential that EDA remain committed to the core mission of partnering with local and regional governments to provide the basic infrastructure to build communities.

Larger metropolitan areas across the nation often have greater access to other funding opportunities that foster economic development in urban areas. Rural regions, however, must rely on assistance from EDA to help provide the building blocks that spur community development and economic growth. Our organization remains committed to ensuring that EDA grants remain competitive and accessible to all rural regions without regard to population and unattainable match requirements. Funding opportunities should never be placed out of the reach of communities that most desperately need EDA assistance.

In conclusion, EDA grants serve a critically important role in the lives of rural Americans. Economic Development Districts, which often serve counties and towns with only one or two full-time staff, use the relatively small planning grants to study the infrastructure and public services that will be needed to maintain a thriving community. Without EDA grants, these localities simply wouldn't be able to afford to provide these basic public services. Without this important funding, industries that are currently located in rural communities may choose to relocate to regions with better infrastructure, and the towns they once supported with jobs and tax revenue will decline and evaporate.

I know you have taken an active role in providing incentives for U.S. manufacturers that have transferred operations overseas to bring those jobs back to our shores and that your FY 2013 bill included \$5 million for the Commerce Department to study what incentives would be most effective. I think the EDDs that use EDA grants are best suited for these manufacturers. In many cases they already have a workforce with the necessary skills or the ability to retrain for a new skill set. The cost of living and doing business in rural communities and small cities make them more attractive than larger urban areas, while maintaining access to the national transportation system or roads, rail, air and water. These communities will produce high quality and affordable goods and reinvigorate manufacturing opportunities in America.

The request I make today on behalf of NADO members is for you to fund EDA at the FY 2012 level of \$257.5 million, an increase of \$36 million from the current funding level proposed in the Continuing Resolution. I will never suggest to you and the members of the subcommittee that this is a small amount of money. These days, every federal dollar is precious. Instead, my goal today has been to show that these additional funds for EDA will have a substantial impact on hundreds of small and rural communities across the nation.

Rep. John Duncan recently told NADO members that rural communities “ask for less and appreciate more” the resources they receive from Washington. A rural county or EDD is skilled at taking relatively small grants and producing real impacts for the areas they represent. If EDA provides an infrastructure grant that allows an employer to bring 100 jobs into a town of a few thousand, it quite possibly could keep that town from disappearing.

I firmly believe that if EDA continues its historic focus on economic planning and public works infrastructure grants, rural communities and small cities will be able to leverage these grants and ensure that today’s generation of new workers do not have to relocate to find a good job. They are the natural place for U.S. companies to relocate manufacturing operations and would play an important role in accelerating economic growth throughout the country.

NADO members look forward to working with you in the future. I would be pleased to answer any questions.

Mr. FATTAH. Well, let me thank you.

EDA I think is the most important economic development agency we have in terms of reaching all communities and types of communities throughout the country. And I know not just in rural areas but in Philadelphia there was an EDA grant that helped establish a neighborhood campus of the community college up in northeast Philadelphia and it is very, very and vital funding.

So thank you for your testimony today.

I would make note that there was some discussion about whether this hearing should go forward today given all of the other activities here in the House, and the chairman determined that it would inconvenience so many people who have come to testify that we should proceed.

So even though it seems a little disjointed that members have to come and go, this is—we have all of your testimony in the record and we appreciate it.

Mr. MCKINNEY. Thank you.

Mr. FATTAH. Thank you.

Mr. CULBERSON [presiding]. Tom Skalak from the University of Virginia. If you could turn your microphone on, sir, and turn your name. There you go. Very good. Thank you very much. Is it Dr. Skalak?

THURSDAY, MARCH 21, 2013.

UNIVERSITY OF VIRGINIA

WITNESS

THOMAS C. SKALAK, VICE PRESIDENT, RESEARCH

Mr. SKALAK. Dr. Skalak.

Mr. CULBERSON. Dr. Skalak. Thank you very much for being with us today and we look forward to your testimony. Your statement will be entered into the record in its entirety.

Thank you, sir.

Mr. SKALAK. Thank you, Mr. Culberson and staff of Chairman Wolf and Mr. Fattah. It is good to be back this morning with you. I represent—good afternoon again, Mr. Wolf.

Mr. WOLF [presiding]. Is this the guy, William and Mary?

Mr. SKALAK. Yes, Chairman Wolf, we consider that an excellent second choice. It is a pleasure to see you again.

I represent the University of Virginia as the vice president for research.

UVA urges the subcommittee to support the highest possible funding levels for federal science agencies in the fiscal year 2014 budget, particularly NSF, space technology, science, and aeronautics programs at NASA, and the Economic Development Administration, EDA.

Investments in these agencies help universities make discoveries at the frontiers of knowledge, engineer new technologies that solve national challenges, and power our innovation-based economy.

But today I really want to tell you a personal story.

Two summers ago I took my son, Scott, who was ten years old, we took him on a canoe trip down the Shenandoah River, which

you may be familiar with, we paddled down the 13-mile stretch of that very historic river. We still run through several miles of wilderness area whether farms, there is no real civilization there, catching some fish, it was a very hot day, we had to dip our hats in the water to keep cool. It was about 100 degrees.

And we came around a bend in the river and on the left-hand side on the bank we saw a nest with two bald eagles. One of them flew up into the air, the other one couldn't fly up into the air. At first we thought he was just protecting the nest, but he actually had an injured wing.

So we had to pass on by because you are not allowed to interfere with the nests of eagles. And so we were hopeful that it would recover.

We went back last summer and we saw as we came around the same bend the nest again and the two eagles were there. This time they both flew up over the tree line.

As you can imagine, you know, we were happy to see that, and that is a sight that of course my son who was then 11 would probably never forget.

So I am telling you this story because just like that eagle that took the time to heal and then fly up that is the state of our American economy right now.

And you spoke earlier, Mr. Culberson about your grand children and paying our way forward for them. Well, we need the strength and resources to soar again also.

Now last week I was with the vice president of an American Fortune 500 company and he said to me, America has the capital, the drive, and the creativity at a level that far surpasses any other nation in the world.

In a report just last week issued, which I can send you by Merrill Lynch and Bank of America, reported through analysis that cash reserves in American corporations as a ratio to market cap of those same companies has never been higher than in the past 25 years.

Now that cash is going to come off the sidelines in the future and it has to have a place to go. It needs to go into American innovation otherwise it won't. And the only way it will have American innovation to go into is through federal investments in innovation. It is the only way to instill the confidence that that cash will find a place for investments. Markets cannot accomplish that task.

So I would like to thank you, the committee, Chairman Wolf in particular for your championship of the federal science agencies. I hope you will continue to support them and increases for the agencies, because this is the only way to create the new discoveries and the confidence needed for that cash to come off the sidelines and create long-term economic growth in America. It won't happen any other way, and your investments in these science agencies is what allows that to happen.

Thank you very much.

[The information follows:]

**Testimony Regarding the FY 2014 Budget Request
Submitted March 15, 2013 to the
Subcommittee on Commerce, Justice, Science, and Related Agencies
U.S. House Committee on Appropriations by
Thomas C. Skalak, Vice President for Research
University of Virginia**

This testimony is submitted for the record on behalf of the University of Virginia, a non-profit public institution of higher education located in Charlottesville, VA. The University sustains the ideal of developing, through education, leaders who are well-prepared to help shape the future of the nation. In fiscal year (FY) 2012 the University received research awards totaling over \$307 million from all sources (federal and state agencies, industry and private foundations). Of this amount, \$203 million, or 66 percent, came from federal grants and contracts.

As the Vice President of Research and on behalf of the University of Virginia (UVA), I urge the Committee to support the highest possible funding levels for the federal science agencies in the FY 2014 budget, including for the National Science Foundation (NSF), Space Technology at the National Aeronautics and Space Administration (NASA), NASA Aeronautics, and proposed manufacturing programs at NSF and the Department of Commerce. I also urge you to support robust funding for NASA Science and the Economic Development Administration (EDA).

Investments in these agencies will help universities make new discoveries at the frontiers of knowledge, conduct critical research, design and engineer new technologies that solve national challenges, and power our innovation-based economy.

UVA is aware of the difficult budgetary decisions facing the Congress in the coming years, yet federal investments in science and engineering remain absolutely critical to spurring innovation and driving the economy. According to *Science Works for US*, a project of the Association of American Universities (AAU), the Association of Public and Land-grant Universities (APLU), and The Science Coalition, federal funding for research is now at the lowest level (in real dollars) in the past decade.

More than half of our economic growth in the United States since World War II can be traced to science-driven technological innovation. The platform for this innovation has been scientific and engineering research conducted at universities and supported by the federal government through agencies such as NSF, NASA, and the Department of Commerce.

Considering the tight budget conditions that the Country faces, it is imperative to continue to make strategic investments in critical areas of science and engineering that will produce technological innovation and societal benefit. For example, UVA supports the Advanced Manufacturing Partnership to power our state's manufacturing base and help advance technologies to address challenges in energy, health, and security.

In Virginia, UVa has partnered with Virginia Tech and Virginia State University to create the Commonwealth Center for Advanced Manufacturing (CCAM) at a new Rolls-Royce manufacturing site in an impoverished section of Prince George County. Along with private partners such as Rolls-Royce North America, Siemens, and Canon, this research facility is spurring innovations that can be applied directly to real manufacturing processes and technologies. CCAM also trains students to become the next generation of manufacturing technology leaders.

National Science Foundation

The University of Virginia supports the highest possible funding level for the National Science Foundation (NSF) in FY 2014. Ground-breaking discoveries that spur innovation and help solve critical societal challenges would not be possible without the foundational work of basic research. Universities conduct most of the basic research in this country, and NSF is a critical funder of basic research in engineering and computational, physical, environmental, social, and biological sciences. In the last fiscal year, researchers at UVa received over \$24 million in competitive NSF grants that support research in all areas of science and engineering.

NSF funding has allowed faculty and students at UVa to conduct ground-breaking research to improve our nation's wireless networks, advance technologies to transform solar energy into liquid fuel, develop cutting-edge heating and cooling technologies, understand how environmental change impacts coastal ecosystems, and revolutionize tissue regeneration of nerves and ligaments, among many other initiatives. Funding has also supported critical efforts to increase the number of women and minority students in STEM fields, enhance teacher training, develop improved curricula for elementary school students in math and engineering, and extend pathways for community college students to earn four-year degrees in fields such as engineering. NSF is at the forefront of efforts to ensure that basic research is transformed into products and knowledge that improve everyday life and grow our innovation economy. UVa has utilized NSF funding to create improved networks between the university and industry in fields such as bioengineering to enhance innovation and create new jobs.

Specifically within NSF, we support robust funding for Research and Related Activities, which funds ground-breaking research across the NSF directorates, and Education and Human Resources, which funds critical education efforts.

Economic Development Administration (EDA)

I urge the Committee to provide the highest possible funding for the Economic Development Administration (EDA). EDA's mission is to lead the federal economic development agenda by promoting innovation and competitiveness, preparing American regions for growth and success in the worldwide economy. No other federal agency provides funding for local, state, and regional partners to create sustainable economic drivers, such as research parks.

UVa supports continued investments in EDA's i6 program. In September 2012, UVa partnered with all universities in the state and many corporate partners to establish the Virginia

Innovation Partnership (VIP) with \$1 million in funding from EDA's i6 program. VIP, a proof of concept funding network to support rigorous market-facing development of new technology across the Commonwealth of Virginia, links six planning districts, all of Virginia's research universities, five community colleges, over 15 corporate partners, and ten business incubators, as well as several economic development agencies and crowd-funding organizations. This year's funded projects include information technology solutions to traffic congestion, cybersecurity measures for preventing internet/web attacks, development of a vaccine for Lyme Disease, and a revolutionary method for cooling computer chips in data centers with addressable annual markets and job creation valued at over \$40 billion. Targeted investments such as EDA's i6 have an outsized impact on driving forward the nation's innovation economy.

UVa supports robust funding for a new Regional Innovation Strategies program, as authorized in the America COMPETES Act. This program would help build regional innovation clusters based on the strength of local communities and regions through competitive awards for activities relating to the formation and development of regional innovation clusters, including research parks.

National Aeronautics and Space Administration (NASA)

UVa urges the Committee to include the highest possible funding for NASA Science in FY 2014. Funding for NASA Science is critical to the exploration of our planet and universe that provides inspiration for future generations, the development of cutting-edge technologies, and knowledge to protect our country from hazards such as national disasters. ***UVa also supports funding of the Space Technology program.*** This program catalyzes partnerships between NASA, universities, and industry to develop advanced technologies in areas such as communications, sensors, robotics, materials, and propulsion.

In addition, ***UVa supports the highest possible funding for NASA Aeronautics.*** Aeronautics research funding supports efforts to develop new materials, alternative fuels, and the Next Generation Air Transportation System. Aeronautics is also a critical funder of hypersonics research that could eventually revolutionize how NASA launches payloads into space and how the US Air Force conducts long-range missions. UVa is home to the National Center for Hypersonic Combined Cycle Propulsion, a state-of-the-art center, funded through NASA Aeronautics, working to provide the analytical foundation for the development of advanced engines for a future hypersonic aircraft. Sustained funding for NASA Aeronautics ensures the nation's leadership in next-generation flight platforms.

As a member of the National Institute of Aerospace (NIA), a non-profit research and graduate education institute, UVa and other consortium members work with the NASA Langley Research Center to conduct leading-edge aerospace and atmospheric research, develop new technologies for the nation and help inspire the next generation of scientists and engineers.

Investing in U.S. “Innovation Security” – All Agencies

UVa recommends that Congress and the Administration consider the creation of a new program at each of the federal science agencies to support proof-of-concept research and development at universities. A new program was authorized at the National Institutes of Health (NIH), based on this concept, as part of the 2011 Small Business Innovation Research/Small Business Technology Transfer Research Reauthorization and UVa recommends its expansion to other research agencies. It is important to note that this initiative should not be for later stage product development or for more applied pre-commercial research; rather, it should be for true proof-of-concept research or prototype development best conducted in the settings where discoveries and innovations perceived to have commercial application are first developed. Such funding should be allocated after rigorous evaluation by carefully assembled panels of local experts in translational and proof-of-concept research – this is key to scaling success to the national level. Among the criteria for awards under this initiative should be the demonstrated willingness and capability of a university in engaging project management boards comprised of industry, start-up, venture capital, technical, and business/market experts. Additionally, successful applicants for this funding should be required to prove their performance and agility in managing translational projects stressing market-relevant milestones, in conducting rigorous oversight and management of such projects, and in their willingness to withdraw funding from projects failing to reach essential milestones so that funding can be re-allocated to projects with more potential.

UVa is devoting significant institutional resources to the process of bringing discoveries to the marketplace and has experienced considerable success. An independent audit has shown that our proof of concept funds have led to a 7:1 return on investment after five years and a 42:1 return on investment for the top ten percent of portfolio projects. We attribute UVa’s success in proof-of-concept research to the now nationally well-known Coulter process, involving a very diverse review board, in-person final review sessions, milestone-driven projects, quarterly reporting that is effective in re-directing projects, the “will to kill” projects or re-direct funds if insurmountable obstacles occur, and excellent networking to the venture capital and private sector. The key differentiators of this process as we employ it at UVa versus most prior proof-of-concept funding mechanisms is the in-person diligence on the involved people and ideas, dedicated project manager, the diverse composition of the board, the urgency of quarterly reviews, and will to re-direct funds as results emerge.

Conclusion

I would like to thank the Committee, specifically Chairman Wolf, for your support of the federal science agencies in these tough budgetary times. While we understand that overall funding is greatly constrained, I hope that you will choose to support strategic increases for the federal science agencies that spur innovation, strengthen our technology and economic base, and train the next generation of scientists and engineers. Further investment in discovery science and commercialization will help create the new discoveries and technologies essential for long-term economic growth. I thank you for your consideration of these important issues.

Mr. WOLF. Well, thank you, we will, and UVA is a great university. Two of my kids went there and please give my best to Teresa Sullivan your president, I think she does an outstanding job and thank you for your testimony.

Where were you in the bend? Because the Shenandoah River much of it is in my district, where were you?

Mr. SKALAK. We were in the 13-mile stretch.

Mr. WOLF. Where?

Mr. SKALAK. Between—lets see just west of Rock Fish Gap and then going—going down river.

Mr. WOLF. But any way, welcome.

Mr. Fattah.

Mr. FATTAH. Thank you for your testimony and for your great work, and even though the chairman says it is a great university I think I have to agree even though we have a lot of great ones in Philadelphia, so—

Mr. SKALAK. Thomas Jefferson, yes, excellent.

Mr. FATTAH. Thank you.

Mr. WOLF. Great. Thank you.

Mr. CULBERSON. Please pass on to your colleagues that they have got no better friends than Chairman Wolf, Mr. Fattah, and this subcommittee when it comes to investing in the sciences, in NASA, and we all recognize how vital for the future that strategic investment is and we will be there. Even though we are living on borrowed money that is a priority we have to continue to fund.

Thank you.

Mr. SKALAK. That money is critical for the future of our grandchildren. You bet.

Thank you. Thank you, Chairman Wolf.

[Pause]

Mr. WOLF. Mr. Perry, welcome.

Mr. PERRY. Hi.

Mr. WOLF. Welcome to the committee. Unfortunately we are running out of time, there is a four-minute time.

Mr. PERRY. Okay.

Mr. WOLF. Your full statement will appear in the record.

THURSDAY, MARCH 21, 2013.

NATIONAL ASSOCIATION OF DRUG COURT PROFESSIONALS

WITNESS

MATTHEW PERRY, AMBASSADOR OF DRUG COURTS

Mr. PERRY. Okay. Chairman Wolf, Ranking Member Fattah, distinguished members of the subcommittee, I am honored to appear before you today to discuss an issue that I have come to believe is the most important criminal justice reform of our lifetime. Drug courts.

Last year the House of Representatives had the vision to increase funding for drug courts to \$45 million at the Department of Justice as well as \$4 million for veterans' treatment courts so that

the men and women who have served this Nation receive the treatment they have earned.

Today I am asking our incredible champions in the House to maintain \$45 million for drug courts, \$4 million for veterans' treatment courts in the fiscal year 2014 budget.

This investment will generate immediate returns by any standard you choose to measure from unmatched cost savings stemming from reduced rearrests, law enforcement contracts, and court hearings to lives restored, families reunited, and communities rescued from the epidemic of drug abuse and crime.

I know firsthand the personal and societal devastation caused by substance abuse. When I found recovery from prescription drug abuse I have dedicated myself to help others.

I realized that as a result of my addiction I have lived by life completely for myself for the first half of my life and found that the answers were coming in deciding that the second half of my life needed to be about service, about others. And this is precisely why I make it a priority to come to Washington, D.C. and meet with you about drug courts.

Two years ago, I led a rally at the Capitol with hundreds of drug court professionals from across the country, we met with members of Congress and told them of the credible success of programs in their state.

That same year I was honored to speak at a briefing with the House Committee on addiction, treatment, and recovery, and it was then that fellow actor Martin Sheen turned to me and said, Matthew, you are becoming an activist, and I said to him, Martin, thank you, I feel like an activist, and then I turned to a friend of mine and said, please go and look up that word because I don't know what it means. But I apparently am becoming one.

So every time I visit the Nation's capital I am reminded of the outstanding leadership of this great body. So I am here today to speak to you once again about drug courts.

Drug courts are the single most effective program for getting serious drug addicts into life-long recovery, putting them back to work, back in school, and back with their families.

I have seen individuals mire in the deepest depths of addiction transformed by drug courts. I have spoken with veterans who after years of being unable to sleep without painkillers and alcohol are now healthy, law-abiding pillars of their community. I have met children whose families have been served because of drug court and only drug court.

I have how much time?

Mr. WOLF. Not much.

Mr. PERRY. I got about another page, but I will try to be very likable and charming.

From saving money to saving lives, from eliminating racial disparities to protecting public safety, from cutting crime, to restoring families, for coming to the aid of our veterans, to stopping impaired drivers, drug courts are a budget solution that we cannot afford to cut.

There are hundreds of other reasons, but for the sake of timing I will give you four of them.

First drug courts reduce recidivism at a level unmatched by any other program by closely supervising participants and keeping them in treatment long enough to find permanent recovery. Drug courts are a stabilizing force on our criminal justice system. And this is an important fact.

Approximately 75 percent of the people who complete drug court will never be arrested again. When drug court is unavailable due to budget costs roughly 80 percent of addicted offenders will re-offend and wind up right back before the judge.

Second, drug courts save this country money. More research has been published on the effects of the courts than an virtually all other criminal justice programs combined. The facts are now known, drug courts have been found to save up to \$13,000 for every individual they serve.

Third, drug courts have stepped up to the growing number of veterans who face charges stemming from substance abuse to mental health issues.

The wars in Iraq and Afghanistan have taken an unprecedented toll on our men and women in uniform. While most return home strengthened by their service, far too many struggle in their effort to readjust to life outside the military.

Often mental—very close to the end. Often mental health issues are compounded by substance abuse, family strife, unemployment, and homelessness ultimately leading to incarceration.

With 30,000 soldiers expected to come home this year we cannot afford to cut the last line of defense between their healthy future and a life of mental anguish and self-medication.

Finally, drug courts are being successfully implemented across the country in states like Texas and New York. Drug courts are reducing the prison population so much so that expensive prisons are closing their doors.

In small towns like Somerset, Kentucky the drug court is helping to take back the community from the scourge of prescription drug abuse.

Today over 2,700 drug courts in the United States annually serve 135,000 seriously addicted prison bound offenders.

Every citizen benefits when one of these drug courts gets an addicted person clean and sober, pays taxes, and becomes a productive citizen.

Now, we live of course in unique and uncertain economic times and there is no doubt that the decisions that you have to make are not easy, but given the overwhelming evidence of drug court success and the billions of dollars that have already been saved I hope that this is one decision that will be easy.

I strongly urge the House of Representatives to maintain \$45 million for drug courts at the Department of Justice and \$4 million for veterans' treatment courts.

This is something that is doing the right thing and saves money. I don't think you can say that about too many things.

So thank you for letting me talk here today.

[The information follows:]

**U.S. House of Representatives, Committee on Appropriations
Subcommittee on Commerce, Justice, Science and Related Agencies
“FY 2014 Members and Outside Witness Hearing”**

**Testimony of Matthew Perry
March 21, 2013**

Chairman Wolf, Ranking Member Fattah, distinguished Members of the Subcommittee, I am honored to appear before you today to discuss an issue that I have come to believe is the most important criminal justice reform of our lifetime: Drug Courts. Last year, the House of Representatives had the vision to increase funding for Drug Courts to \$45 million at the Department of Justice, as well as include \$4 million for Veterans Treatment Courts so that the men and women who have served this nation receive the treatment they have earned. Today I am asking our incredible champions in the House to maintain \$45 million for Drug Courts and \$4 million for Veterans Treatment Courts in the Fiscal Year 2014 budget. This investment will generate immediate returns by any standard you choose to measure, from unmatched cost-savings stemming from reduced re-arrests, law enforcement contacts and court hearings to lives restored, families reunited, and communities rescued from the epidemic of drug abuse and crime.

I know firsthand the personal and societal devastation caused by substance abuse. When I found recovery from prescription drug abuse I dedicated myself to helping others. This is precisely why I make it a priority to come to Washington, DC and meet with you about Drug Courts. Two years ago, I led a rally at the Capitol with hundreds of Drug Court professionals from across the country. We met with Members of Congress and told of the incredible success of programs in their state. That same year, I was honored to speak at a briefing with the House Committee on Addiction, Treatment and Recovery. Every time I visit the nation's capitol I am reminded of the outstanding leadership of this great body. So, I am here today to speak with you once again about Drug Courts. Drug Courts are the single most effective program for getting serious drug addicts into life-long recovery, putting them back to work, back in school, and back with their families.

I have seen individuals mired in the deepest depths of addiction transformed by Drug Courts. I have spoken with veterans who after years of being unable to sleep without pain killers and alcohol are now healthy, law abiding pillars of their community. I have met children whose families have been saved because Drug Court, and only Drug Court, was able to keep their mother from using Methamphetamine.

From saving money to saving lives, from eliminating racial disparities to protecting public safety, from cutting crime to restoring families, from coming to the aid of our veterans to stopping impaired drivers, Drug Courts are a budget solution that we cannot afford to cut. There are hundreds of other reasons, but for the sake of time I will give you just four.

First, Drug Courts reduce recidivism at a level unmatched by any other program. By closely supervising participants and keeping them in treatment long enough to find permanent recovery, Drug Courts are a stabilizing force on our criminal justice system and society at-large. Approximately 75% of the people who complete Drug Court will never be arrested again. When Drug Court is unavailable due to budget cuts? Roughly 80% of addicted offenders will reoffend and wind up right back before the judge.

Second, Drug Courts save this country money. More research has been published on the effects of the courts than on virtually all other criminal justice programs combined. The facts are now known: Drug Courts have been found to save up to \$13,000 for every individual they serve. Research has also confirmed that the return on investment far exceeds that of any other program. Drug Courts save \$2.21 for every \$1 invested. When indirect cost-offsets were taken into account — such as savings from reduced foster care placements and healthcare service utilization — studies have reported economic benefits as high as \$27 for every \$1 invested.

Third, Drug Courts have stepped up to serve the growing number of veterans who face charges stemming from substance abuse to mental health issues. The wars in Iraq and Afghanistan have taken an unprecedented toll on our men and women in uniform. While most return home strengthened by their service, far too many

struggle in their effort to readjust to life outside the military. Often, mental health issues are compounded by substance abuse, family strife, unemployment, and homelessness; ultimately leading to incarceration. Drug Courts and Veterans Treatment Courts ensure that the criminal justice system effectively identifies, assesses, and responds to all justice-involved veterans appropriately, keeping them out of jail and connected to benefits and treatment. With 30,000 soldiers expected to come home this year, we cannot afford to cut the last line of defense between their healthy future and a life of mental anguish and self-medication.

Finally, Drug Courts are being successfully implemented across the country. In states like Texas and New York, Drug Courts are reducing the prison population so much that expensive prisons are closing their doors. In small towns, like Somerset, Kentucky, Drug Court is helping to take back a community from the scourge of prescription drug abuse. Today, over 2,700 Drug Courts in the United States annually serve 135,000 seriously addicted, prison bound offenders. Every citizen benefits when one of these Drug Courts gets an addicted person clean and sober, pays taxes and becomes a productive citizen.

We live in unique and uncertain economic times and there is no doubt that the decisions you must make are not easy. But given the overwhelming evidence of Drug Courts success and the billions of dollars that have already been saved, I hope that this is one decision that will be easy. I strongly urge the House of Representatives to maintain \$45 million for Drug Courts at the Department of Justice and \$4 million for Veterans Treatment Courts.

Mr. WOLF. Well, thank you very much.

One, I appreciate your testimony that you are willing to come forward and use your reputation and credibility and that is to your credit, so thank you.

Secondly, the committee is very, very supportive of drug courts and I think you can count on that we will continue to fund it.

Mr. Fattah.

Mr. FATTAH. And in the 1980s I helped create the drug courts in Pennsylvania, and I know of that great work has been done and I want to thank you for your personal testimony and support for this initiative, and I think that you have—and the chairman and this committee, people who are committed both for the drug courts and to the veterans' courts in terms of helping our veterans.

And thank you very much.

Mr. PERRY. Thank you.

Mr. WOLF. Mr. Culberson.

Mr. CULBERSON. Thank you—I am chairman of the military construction and Veterans' Administration Subcommittee on the Appropriations Committee and we do all that we can as well to help make sure that they are there for the veterans and deeply appreciate your personal testimony and just to reiterate the strong support that Congress and this committee has to this vital work.

Thank you.

Mr. PERRY. Thank you guys. Great, thanks.

Mr. WOLF. Mr. Keating? Go ahead.

THURSDAY, MARCH 21, 2013.

UNITED STATES CONGRESS

WITNESS

HON. BILL KEATING, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF MASSACHUSETTS

Mr. KEATING. This is going to be—definitely when I change this thing there will be definitely a downgrade in pay as I put that over here. You know, did you ever feel like, you know, in a formal suit that, you know, in a black tie event your pair of brown shoes that is maybe—well, thank you.

Mr. WOLF. But I am sure you are going to do well though.

Mr. KEATING. Well, I hope so, Mr. Chairman.

Mr. Chairman, thank you, and Ranking Member Fattah, thank you, and members of the committee.

You know, I am fortunate in my district as we all feel I think in our own districts to represent a beautiful coastline area and part of Massachusetts that is the south shore, the south coast, Cape Cod and the islands, and in our area, Martha's Vineyard in Nantucket, but in our area investments in fisheries management, costal restoration, regional ocean planning, competitive grant programs, and the critical science research makes a difference between a paycheck and a pink slip in our district.

I would like to begin by urging my colleagues in the committee to work with me and my peers in providing emergency assistance for an economic disaster issued by the Department of Commerce in September of last year for the northeast multi-species ground

fish industry. They are virtually being eliminated right now. This is an unprecedented declaration by the Secretary in advance of the 2013 fishing season which begins in less than six weeks.

Members of the committee have already received many appeals from my colleagues as well as from myself on this subject and the true impact of fisheries disasters on coastal communities is incalculable.

Fishermen from coast to coast will face an immediate and irreparable loss of livelihood if we are unable to provide them with the financial assistance to survive during the next fishing season. These are generations of families that have started small fishing boats.

I thank you for your previous cooperation, hope that you will continue to work with me to provide this emergency funding.

In recent years our fishing business has suffered due to inadequate data collection that dictates shares. We can and we must implement fair and effective fisheries management policies while targeting government abuse and inefficient waste.

To that extent I encourage the committee to provide a robust funding for the National Oceanographic and Atmospheric Administration's National Marine Fisheries Service.

It is imperative that the National Marine Fisheries Service maintain the resources to increase the frequency and accuracy of these stock assessments that are affecting the livelihood of these fishermen, to invest in cooperative research with the industry, and to improve recreational fishing data collection programs.

Another top priority for southeastern Massachusetts is finding the investments in ocean and coastal management and science.

Massachusetts has set a national standard for implementation and comprehensive and proactive ocean and coastal management through our participation in the northeast regional ocean council. It is through regional ocean partnership grants that the commonwealth has been able to coordinate and navigate the complex resource management conflicts that arise from these promising new ocean usages.

To this end I hope to see \$10 million provided for the regional ocean partnership competitive grants program.

As many of you all are familiar 2002 brought some of the most extreme and unprecedented climate events ever recorded. My district is just one example of many of the communities dependent on core habitat restoration and protection, programs that directly benefit these economies and are critical to restoring coastal estuary habitats.

Thus it is imperative that we provide funding for NOAA's coastal restoration programs, including the community-based restoration program, the estuary restoration program, the coastal and estuary land conservation program.

To recite, there is an undeniable link between restoration and conservation efforts in coastal communities like mine and the economy.

Furthermore, before coming to Congress I served as a district attorney for 12 years, and one of my top concerns has always been the public safety, particularly during these times of fiscal uncertainty.

And to that end I would like to request that the Staffing for Adequate Fire and Emergency Response (SAFER) grant programs be appropriated to match the authorization that we passed in December.

In one of my cities, New Bedford fortunately the whole fire department being inadequately able to respond. In my neighboring town of Fall River where they had that—it is an oil mill town with oil soaked buildings and old, you know, types of inventories of buildings, not only commercially and through housing, and these people are in peril as a result of it.

So it is critical for fire houses not only in my district but across the entire country, particularly in the communities I mentioned.

New Bedford where the understaffed men and women are already serving the needs of multiple communities in the region.

Surely we can find alternatives to stripping the backbone of our communities. Police officers, ambulance, but particularly with the SAFER grants fire departments of the resources that protect residents.

This is an issue in which I have been deeply engaged and one I will continue to pursue through the appropriations process.

Finally I would like to note that one of my first acts as a district attorney was to initiate a drug court discretionary grant program. I did that as a prosecutor.

I strongly support funding for the drug court discretionary grant program which helps to develop treatment in during courts that integrate substance abuse, mandatory drug testing, and transitional services for non-violent substance abuse suspects.

The American people understand this is the year of budget constraints, but my testimony not only reflects the priorities of my district in Massachusetts, but echoes the messages I have heard from across the country.

We must insure that this budget incorporates effective funding decisions and encourages efficiencies but doesn't overlook the critical needs of Americans of all backgrounds.

Once again, thank you, Mr. Chairman, thank you members of the committee for your time.

I won't be available to sign autographs afterwards, but I do appreciate it.

[The information follows:]

Rep. William R. Keating (MA-09) Testimony
House Commerce, Justice Science Appropriations Subcommittee Hearing
March 21, 2013

Thank you to Chairman Wolf, Ranking Member Fattah, and Members of the Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies for holding today's hearing on funding for Fiscal Year 2014 and for providing me with the opportunity to testify. While I appear before you to highlight some of my top priorities, I would like to emphasize that I will be following this hearing with letters to the Subcommittee specifying funding levels for additional programs that may go unmentioned today.

I have the distinct honor of representing Southeastern Massachusetts, including Cape Cod, the Islands of Nantucket and Martha's Vineyard, and the South Coast, including the Port of New Bedford – the highest grossing commercial fishing port in the continental 48 states. Once the home of New England's legendary whaling industry, this region remains inexorably linked to the ocean and stands in a position to become a global leader in sustainable jobs, new technologies, and emerging marine industries. For us, investments in fisheries management, coastal restoration, regional ocean planning, competitive grant programs and critical scientific research provided under the Commerce, Justice, and Science appropriations bill make the difference between a paycheck and a pink slip.

First, I must begin by urging my colleagues on the Appropriations Committee to work with me and my peers in providing emergency assistance to the states of Massachusetts, Maine, New Hampshire, Rhode Island, New York and Connecticut for an economic disaster issued by the Department of Commerce in September of last year for the Northeast Multispecies (Groundfish) fishery. This was an unprecedented declaration by the Secretary in advance of the 2013 fishing season, which begins in less than six weeks, and Members of the Committee have already received many letters and appeals from my colleagues and me on this subject. I thank you for your previous cooperation, and hope that you will continue to work with me to provide emergency funding.

New England's fishermen are not alone in their suffering. In 2012, Mississippi oyster and blue crabs and Alaskan Chinook salmon fisheries were also found to be suffering from an economic disaster, while Hurricane Sandy devastated the ports of New York and New Jersey. Up again such severe restrictions in allowable catch for the season beginning May 1st that many of them are facing the reality of losing their livelihoods and only source of income. The Magnuson Stevens Fishery Conservation Management Act and the Interjurisdictional Fisheries Act authorize funding for fishery disaster relief provided that Congress appropriate the necessary funds. To date, Congress has failed to act and appropriate adequate funding.

The true impact of fisheries disasters on coastal communities is incalculable. Fishermen from coast to coast will face an immediate and, in some cases, irreparable loss of livelihood if Congress is unable to provide them with financial assistance to survive the 2013 fishing year. Sincere attempts by federal and state government and industry alike to combat overfishing and rebuild stocks have repeatedly fallen flat due to lapses in resources and inaccuracies in research. In recent years, our fishermen's businesses have suffered due to inadequate data collection that

dictates catch quantities. We can – and we must – implement fair and effective fisheries management policies while targeting government abuse and inefficient waste.

To that extent, I encourage the Committee to provide level funding for the National Marine Fisheries Service. It is imperative that the National Marine Fisheries Service maintain the resources necessary to increase the frequency and accuracy of stock assessments, invest in cooperative research with the industry, and improve recreational fishing data collection programs. NOAA has committed to conducting an end-to-end review of the flawed stock assessment process with the assistance of Massachusetts' very own scientists and resources throughout this year, but cuts in funding would setback any implementation of the review's findings. Further, I hope that Members can work together to assist NOAA Fisheries in their ability to continue to provide at-sea monitoring coverage through the 2013 fishing year. The Agency has recently announced its intent to cover the cost as they have in previous years, provided that the number of trips not exceed the number from the 2012 fishing year. I am very concerned that the Agency's ability to meet this assurance comes at a cost: the very research that we are striving to improve.

Another top priority for Southeastern Massachusetts is continued funding for investments in ocean and coastal management and science. To this end, I hope to see \$10 million provided for the Regional Ocean Partnership competitive grants program. Massachusetts has set the national standard for implementation of comprehensive and proactive ocean and coastal management through our participation in the Northeast Regional Ocean Council, and it is through Regional Ocean Partnership grants that the Commonwealth has been able to coordinate amongst all stakeholders to navigate the complex resource management conflicts that arise from these promising new ocean uses.

We have a shared vision for this region akin to the development of Silicon Valley, where we will build on our existing and developing infrastructure and knowledge base to maximize the economic potential. The development of the 20 acre South Terminal in New Bedford harbor as a staging area for marine construction, shipping and repairs of turbines is already attracting investment attention and the institutional knowledge found at facilities like UMass Dartmouth, Wood's Hole Oceanographic Institute, Mass Maritime, Bristol Community College and the proposed maritime community college in Marshfield, working together with a diverse and skilled workforce has positioned Massachusetts to become a leader in offshore technologies.

In order to fulfill this potential, it is critical that we provide adequate funding for Regional Ocean Partnership grants. Across the northeastern coastal states, \$13.4 billion in GDP comes from ocean sectors in coastal counties. Regional Ocean Partnership Grants contribute to the protection and management of the coastal and ocean natural resources that fuel this important coastal economy. Nearly 100,000 workers in Massachusetts are employed by ocean-related industries, earning nearly \$2.8 billion in wages and contributing over \$5.5 billion.

To that extent, I also encourage the Committee to provide robust funding for NOAA's Cooperative Institute for North Atlantic Region (CINAR) CINAR is one of NOAA's 18 multi-institution cooperatives and includes the Woods Hole Oceanographic Institute in my district. As

the demand for timely data on weather, climate patterns, fisheries, oceans and additional coastal data grows, cooperative institutes like CINAR will become more and more critical.

As many of you are all too familiar, 2012 brought some of the most extreme and unprecedented climate events ever recorded. From Hurricane Sandy to the Superstorm in February and countless blizzards in between, the fragile coastal ecosystems of my home state were ravaged time and time again by hurricane-force winds and unforgiving tides. My district is just one example of the many communities dependent on core habitat restoration and protection programs that directly benefit these economies and are critical to restoring coastal and estuarine habitats. \$34 million for NOAA's coastal restoration programs, including the Community-based Restoration Program, the Estuary Restoration Program, and, NOAA's only coastal land acquisition program: the Coastal and Estuarine Land Conservation Program (CELCP), would directly leverage private investments and promote a strong regional economy. Additionally, I request robust funding for NOAA's National Estuarine Research Reserve System, which provides funding to states through 28 cooperative agreements that contribute science, education and training to offset declining local and state budgetary resources.

The health of my district's economy is directly linked to the health of our ecosystems, and I'm not just talking about the recreational and commercial fishing industries. We are dependent on the influxes of millions of tourists to our region's beaches and waterways each year. As populations and economies grow, bringing increased development and pressure along our coasts, NOAA's coastal programs offer irreplaceable support to communities throughout the nation that are willing to invest in the restoration of land that has significant ecological and economic values. In Massachusetts, where we just celebrated the 20th anniversary of Stellwagen Bank National Marine Sanctuary, we know firsthand how communities will directly benefit from robust funding for NOAA's Office of National Marine Sanctuaries – not only from the conservation efforts that this funding allows but from the tourism that at also promotes.

Further, I would like to emphasize the need for continued restoration of the John H. Prescott Marine Mammal Rescue Assistance Grant Program at \$4 million. Last year, the President's budget request eliminated funding for the Prescott Grant Program, which would have left local organizations and private donors to bear the burden of replacing nearly \$4 million in federal funds. Collaboration with regional organizations is essential to the National Marine Fisheries Service's success in implementing its mandates and this funding level is critical if we are to preserve the progress made in protected species research and management, continue to provide valuable species recovery grants, and provide funding to the local subsidiaries that carry out NMFS' requirements.

Finally, I urge you to include \$16 million for NOAA's National Ocean Service (NOS) National Centers for Coastal and Ocean Science Extramural Research program. States and coastal communities rely upon the scientific information provided under this competitive extramural program to understand, monitor, manage and mitigate impacts associated with the increasing severity of Harmful Algal Blooms and hypoxia events in marine, Great Lakes, and other water systems.

To reiterate: there is an undeniable link between restoration and conservation efforts in coastal communities like mine and their economic viability. Now is not the time to cut funding for programs that will keep much-needed dollars in the pockets of hardworking men and women.

Before coming to Congress, I served as a District Attorney for twelve years. One of my top concerns has always been for public safety, particularly during times of fiscal uncertainty, and, to that end, I respectfully urge you to maintain support for the Violence Against Women Act (VAWA) and the Family Violence Prevention and Services Act (FVPSA).

Finally, I would like to request that the Staffing for Adequate Fire and Emergency Response (SAFER) grant program be appropriated to match the authorization that we passed in December. This funding is critical for fire houses across the country, particularly in New Bedford where understaffed men and women are already serving the needs of multiple communities in the region. Surely we can find alternatives to stripping the backbone of our communities – police officers, fire departments, ambulances – of the resources that protect our residents and bring stability to our neighborhoods. I would like to note that this is an issue in which I have been deeply engaged and one I will continue to pursue throughout the appropriations process. I look forward to working with my colleagues on the full Committee to preserve the SAFER grant program.

The American people understand: this is the year of budget constraints. My testimony not only reflects the priorities of the Ninth Congressional District of Massachusetts, but echoes the messages I have heard from across the country. We must ensure that this budget incorporates effective funding decisions that encourage efficiency but do not overlook the critical needs of Americans of all backgrounds.

Once again, I thank Chairman Wolf, Ranking Member Fattah, and Members of the Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies for the opportunity to testify today.

Mr. WOLF. Well, I do have a request though.

Mr. KEATING. Okay.

Mr. WOLF. No, my—thank you for your testimony.

Mr. KEATING. Thank you.

Mr. WOLF. My wife is from Marble Head and I have a daughter who owns a house in Winthrop and a former person who worked on me is a Catholic priest, Roger Landry in Fall River. Do you know Roger?

Mr. KEATING. I know of the name, I don't know him.

Mr. WOLF. He is a wonderful fellow. So would you call Roger when you go back there and look him up for me? That is all I wanted.

Mr. KEATING. I will call Roger and make sure he is aware of this committee's concern for the SAFER grants, for the fishing industry. But I will personally I will. I will.

Mr. WOLF. Good. Because I have not seen him for a number of years and he was in the Vatican for a number of years and I understand he is now back. So I have not seen him, but if you can—

Mr. KEATING. Well, it is a great community with a lot of challenges, and I am sure he will serve it well.

Mr. WOLF. And you have a great area.

Mr. Fattah.

Mr. FATTAH. Thank you for your testimony and we share your concern about a number of these programs.

Thank you.

Mr. KEATING. No, thank you.

Mr. WOLF. Thanks so much.

Mr. KEATING. I appreciate it. Difficult times, difficult decisions, and I appreciate your efforts.

Mr. WOLF. Sure. Thanks.

Mr. KEATING. Thanks.

Mr. WOLF. The hearing will come to order.

And we have this light. I apologize for it. You know everyone is limited to four minutes, but it is because people are out of town and so if you can—I mean, we are not going to—but if you can, we would appreciate it. Thank you.

First witness of this panel is Jason Patlis, National Marine and Sanctuary Foundation. His whole statement will appear on the record.

THURSDAY, MARCH 21, 2013.

NATIONAL MARINE SANCTUARY FOUNDATION

WITNESS

JASON PATLIS, PRESIDENT AND CEO

Mr. PATLIS. Thank you. Thank you, Mr. Chairman, Mr. Ranking Member, members of the subcommittee.

I realize I have got a tour following in the footsteps of Matthew Perry, but I will do my best.

Mr. WOLF. I thought you were him.

Mr. PATLIS. My mother and my wife might agree with you, but I am not sure anybody else would.

Thank you for the opportunity to testify before you this morning in support of a robust and capable National Marine Sanctuary System and a strong National Oceanic and Atmospheric Administration.

My name is Jason Patlis. I am the president of the National Marine Sanctuary Foundation, and the National Marine Sanctuaries, as you well know, are the underwater compliment to our national parks on land. They represent our national heritage at sea. They protect the best places in the American ocean for the American people now and for future generations.

I know you know the National Sanctuaries well. They are not just American icons. They are anchors for jobs and economic growth and they are also pillars in coastal communities around the country, centers of civic pride.

Knowing the deep cuts that you are looking to make in the federal budget, but also recognizing the return of investment of our National Marine Sanctuaries it is with respect that I request \$55 million to the National Marine Sanctuary program base which is NOAA's ORF \$5.5 million for the PAC fund with the National Marine Sanctuaries.

Now, I want to make just two points with this testimony. First, joining me in recommending these amounts is a national network of community-based, site-based organizations, all total nine in number that stretch from Boston to Hawaii and they all support these recommendations.

First thing I would like to stress is the PAC dollars. These funds go towards vessel acquisition and visitor center construction. Without the PAC funds, visitor centers can't be constructed, research vessels cannot be purchased or maintained quite simply. As much as park managers need vehicles and trucks to do their business on land, sanctuary managers need vessels at sea.

And the National Marine Sanctuary system has much more real estate in the system than national park system does—170,000 square miles.

Taking away PAC dollars is really harmful, but on the flip side, providing PAC dollars is really, really beneficial and I want to give you one example.

NOAA just finished a multi-year project constructing a National Marine Sanctuary visitor center in Santa Cruz for Monterey Bay National Marine Sanctuary.

Federal dollars were leveraged with state and private dollars. Jobs were created. Construction took a number of years and the visitor center just opened this past July.

Within three months, 33,000 visitors passed through the doors. They expect 150,000 visitors annually for that. And it has quickly become a landmark in the Monterey Bay region, so PAC dollars are really important.

The second thing I want to stress is why we are recommending this year a slight increase over the dollars from previous years. Simply as NOAA consolidates its program and streamlines its budget, more and more programs are being absorbed by different offices rising to the top. The National Marine Sanctuaries are such a hub in rising to the top, and so they have got increasing responsibilities, increasing staff as they draw weaker programs into the

programs that are folding and closing within NOAA. So to meet their new authorities they really need some additional money to make that happen.

I want to give you just two examples of what has transpired in the last two weeks that really underscore the importance of National Marine Sanctuaries. You may be aware that on March 8 at Arlington National Cemetery, there was a very moving ceremony for the sailors of the USS *Monitor*.

The back story of that started 40 years ago. I realize my time is up. I will finish the story and then I will end my testimony.

The back story started when the *Monitor* was first designated as a National Marine Sanctuary in 1975, 40 years ago. After that, NOAA began working with the Navy. They pulled up the turret. That was 10 years in itself with a lot of NOAA behind-the-scenes work with the Navy.

Within the turret they discovered the remains of two of the sailors that were lost at sea. NOAA researchers working with the academic community then spent another decade trying to identify who those soldiers among the lost sailors were. Did so to such an extent that they were able to identify the bodies and so, you know, two weeks ago the Navy was able to, up front, with NOAA in the background, recognize those soldiers, recognize the commitment they made to the country and give them the burial that they deserved as American heroes. That is NOAA work. That is NOAA's sanctuary's work and it is congressional appropriations that make that happen.

Last week there was a whale disentanglement in Hawaii, and I am sorry, one last story.

CNN picked it up for five minutes and Hollywood makes movies about this, speaking of Matthew Perry, about disentangling endangered whales, and it went viral on the net, and those were NOAA scientists within the National Marine Sanctuary that did that disentanglement, and they run this program with a couple of million dollars a year with funding support that we are able to leverage through our own fund raising.

And so again, it is congressional appropriations that are doing that kind of work, creating those kinds of stories, captivating the American imagination and allowing that to, you know, to be part of the American story.

So thank you for the support you have given sanctuaries in the past and thank you for the consideration of this request.

[The information follows:]

Mr. Jason Patlis, President and CEO, National Marine Sanctuary Foundation
Testimony Submitted to the House Appropriations Subcommittee on Commerce, Justice,
Science, and Related Agencies
“FY2014 Commerce, Justice, Science, and Related Agencies Appropriations”
March 21, 2013

FY14 Appropriations Request

For thirteen years, the National Marine Sanctuary Foundation (NMSF) has worked with Congress and the National Oceanic and Atmospheric Administration (NOAA) to connect our fellow citizens to the underwater places that define the American ocean – the National Marine Sanctuary System. We remain concerned that NOAA’s Office of National Marine Sanctuaries (ONMS) has not received sufficient appropriations for several consecutive budget cycles. In recognition of the coastal job creation benefits provided by national marine sanctuaries – especially through the procurement of vessels and construction of visitor centers – NMSF respectfully requests that the subcommittee remedy this situation by appropriating:

- ***\$5.5 million to the Marine Sanctuaries Construction Base, within NOAA’s Procurement, Acquisition, and Construction account; and***
- ***\$55 million to the Marine Sanctuary Program Base, within NOAA’s Operations, Research, and Facilities account.***

Joining NMSF in this request is the national network of community-based, non-profit organizations that support specific sites within the sanctuary system. On behalf of their members from coast to coast, the Channel Islands Sanctuary Foundation (CA), Cordell Marine Sanctuary Foundation (CA), Farallones Marine Sanctuary Association (CA), Friends of Thunder Bay National Marine Sanctuary (MI), Hawai’i National Marine Sanctuary Foundation (HI), Monterey Bay Sanctuary Foundation (CA), Olympic Coast Alliance (WA), Sanctuary Friends Foundation of the Florida Keys (FL), and Stellwagen Alive! (MA) support funding the National Marine Sanctuary System at these levels. Please see Appendix I for details.

National Marine Sanctuaries are Unique and Successful Ocean Conservation Tools

Sanctuaries embody our nation’s commitment to preserve the best of the American ocean for future generations – they are our underwater national parks. They support economic vitality and thousands of businesses in coastal communities, preserve vibrant underwater and maritime treasures for our children and grandchildren to enjoy, and provide critical public access for ocean recreation, research, and education. Through stakeholder-driven planning processes designed to accommodate multiple uses of the ocean and validated repeatedly over the 40-year history of the sanctuary program, ONMS successfully manages 13 national marine sanctuaries and the Papahānaumokuākea Marine National Monument.

Numerous external reviews have concluded that sanctuaries are fundamentally well-conceived, cover gaps in other federal laws, and are making progress towards long-term protection of marine ecosystems. Unlike most other ocean resource laws, which focus on controlling specific activities or managing specific species, the National Marine Sanctuaries Act protects nationally significant places, along with the natural, historical, and cultural riches that make them worth preserving for future generations. Experience shows that this approach is vital to maintaining the healthy seascapes that underpin our incredibly productive coastal economies – and that the return on our investment in sanctuaries is simply too valuable to ignore.

Significant Changes to ONMS Responsibilities from FY13 to FY14

While we recognize the challenges associated with providing increased funding in the current budget climate, several ongoing changes within NOAA have worsened the existing shortfall in sanctuary budgets. A slight increase is warranted in FY14 to accommodate the following new priorities.

1) *Marine Protected Areas Center*

Despite the realization of management efficiencies that are actively lowering costs, the proposed FY13 consolidation of NOAA's Marine Protected Areas Center (MPAC) with ONMS was accompanied by funding cuts that sharply reduced the capacity of both programs. We strongly encourage the Subcommittee to consider the complementary nature of activities performed by MPAC and ONMS, and we urge you to ensure that any FY14 funding intended for MPAC is added to the Marine Sanctuary Program base level. Furthermore, given the FY13 consolidation, it is critical that MPAC funds are appropriated to ONMS rather than NOAA's Coastal Management Program (as was the case in prior years).

2) *National Marine Sanctuary of American Samoa*

Following an extensive public process, the Fagatele Bay National Marine Sanctuary expanded from 0.25 to 13,581 square miles, incorporating the Rose Atoll Marine National Monument, in November 2012. We strongly encourage the Subcommittee to ensure that FY14 funding intended for Rose Atoll management is added to the Marine Sanctuary Program base level. Furthermore, given the incorporation of Rose Atoll into the re-named National Marine Sanctuary of American Samoa, it is critical that Rose Atoll funds are appropriated to ONMS rather than NOAA's National Marine Fisheries Service (as was the case in prior years).

National Marine Sanctuaries are Economic Engines for Coastal Communities

Between 2005 and 2009, when overall US employment dropped by 2.3%, coastal tourism and recreation employment grew by 2.7% and helped our nation survive the recession.

Sanctuary stewardship efforts are vital to the success of coastal businesses. According to the National Ocean Economics Program, 72% of ocean and coastal employment – over 1.8 million jobs in 2009 – in the tourism and recreation sector depends on visitor opportunities that require the clean beaches, clean water, and abundant fish and wildlife promoted by the National Marine Sanctuary System. Investing in sanctuaries does much more than simply protect small areas of the ocean – national marine sanctuaries are fueling job creation in coastal communities, and investing in sanctuaries is a down payment on the future of equipment manufacturers, hospitality operators, and ocean recreation vendors, not to mention the many other Americans whose livelihoods are dependent on a healthy ocean and coasts. We offer the following examples to suggest that the benefits of funding our national marine sanctuaries far outweigh the federal outlays that support them:

- Management of the Stellwagen Bank National Marine Sanctuary off Massachusetts costs taxpayers under \$2 million annually, and healthy sanctuary waters draw the tourists who spent \$126 million on commercial whale-watching trips there during 2008 alone, supporting 31 businesses and almost 600 jobs.¹
- Taxpayers spend less than \$3 million per year to manage the Monterey Bay National Marine Sanctuary off California, whose waters are the focus of a marine science and education industry that employed over 2,100 people and had a \$291 million budget in 2012.²

- The Florida Keys National Marine Sanctuary, where management costs less than \$6 million per year, protects coral reefs and legal fishing opportunities that are the backbone of a marine tourism and recreation industry in the two adjacent counties – employing over 70,000 people and contributing \$4.5 billion per year to state GDP.³

National Marine Sanctuaries Start and Stay in Local Communities

The designation and management of new sanctuaries are wholly dependent on ‘bottom-up’ processes where local communities are involved from the very beginning – sanctuaries actually devolve power from Washington, DC and give constituents control over the destiny of their coasts. All sanctuary rules and regulations are developed on a site-by-site basis, and sanctuaries are designed from the outset to accommodate multiple uses of the ocean. Coastal communities have a controlling influence on sanctuary priorities, ensuring that they address unique, local circumstances. This community-driven approach to decide where sanctuaries are located and what is allowed within them is one of the most public in our democracy – and it’s only one reason why 98% of sanctuaries remain open to fishing.

National marine sanctuaries are created by and for the people: citizens and communities propose sites and then have at least three additional chances to weigh in during the process. In addition, over 700 Sanctuary Advisory Council representatives from the fishing, tourism, and maritime commerce industries; Tribes, state and local government; and researchers, educators, and conservationists spend over 13,000 hours each year to help manage sanctuary operations day-to-day. Sanctuaries are also hubs for volunteer activity: over 100,000 hours are contributed by local sanctuary volunteers each year, and sanctuary volunteer programs in California and Hawai‘i have won the federal government’s Take Pride in America Award (for Outstanding Federal Volunteer Program) for the past two years.

National Marine Sanctuaries’ Programmatic Outlook under Reduced FY14 Funding Levels

Sequestration alone will likely result in the termination of 15 contractors, and six FTE-equivalent positions will remain unfilled (this combination is equivalent to a 5% workforce reduction). In addition, a decrease of \$500,000 in funding for vessel operations and maintenance will most likely result in cancelled cruises and degraded equipment.

We project that additional budget cuts will result in more terminations of contractors who perform FTE-equivalent duties; reduced operations at visitor centers; a lack of contingency funding needed in case of emergencies like oil spills; and additional inoperable vessels tied up at the docks. In addition, lack of funds will likely result in cuts to public access and recreation opportunities, cancellation of partnerships that leverage private funds for taxpayer benefits, and the dismantling of successful education initiatives.

The potential impact of reducing sanctuary appropriations goes far beyond the individual sanctuaries themselves: limiting visitor center hours, eliminating research programs, and diminishing enforcement capacities will prevent ONMS from fulfilling its statutory mandates while also reducing the economic activity and job creation that surrounds healthy sanctuary communities from coast to coast. For example, funding national marine sanctuaries below the recommended levels could force the program to:

- **Cut treasured public access and recreation opportunities for all Americans.**
Funding cuts risk the Florida Keys National Marine Sanctuary’s 767 mooring buoys, which

provide public access and recreational opportunities within the sanctuary while protecting coral reefs and shipwrecks from anchor damage, preserving them for future generations.

- **Restrict enforcement operations that protect legal fishermen.**
Lack of funding jeopardizes on-water patrols for illegal fishermen in the Florida Keys National Marine Sanctuary. In a single 2013 case, illegal fishermen were charged with over 1,300 violations for pilfering 664 yellowtail snapper from a closed area that was recently shown to have provided benefits to both fish populations and commercial and recreational anglers.
- **Dramatically shrink visitor center hours.**
Sanctuary visitor centers serve as the public face of NOAA and see over 350,000 visitors per year, including the Monterey Bay National Marine Sanctuary Exploration Center (Santa Cruz, CA), Mokupāpapa Discovery Center (Hilo, HI), Great Lakes Maritime Heritage Center (Alpena, MI), and Florida Keys EcoDiscovery Center (Key West, FL).
- **Eliminate collaborations with museums that leverage private funds for taxpayer benefits.**
Placing educational exhibits in partner institutions, like the California Academy of Sciences' three-story "California Coast" aquarium, is a successful and cost-effective method for reaching the American public. Over 1 million Academy visitors each year learn how the Gulf of the Farallones National Marine Sanctuary protects America's valuable ocean and maritime resources.
- **Cancel partnerships with universities that leverage private funds for taxpayer benefits.**
Funding cuts could risk research alliances with Oregon State University, Stanford University, and the University of California for collection of wind, tide, current, and marine life data critical to maritime commerce and search-and-rescue operations within the Channel Islands, Monterey Bay, Gulf of the Farallones, Cordell Bank, and Olympic Coast National Marine Sanctuaries.

NOAA Needs Sufficient Funds to Fulfill its Responsibilities to the American People

As a member of the Friends of NOAA coalition, the National Marine Sanctuary Foundation works to educate and inform interested audiences about the full range of NOAA activities, enabling the agency to more effectively carry out its responsibilities relating to our ocean and coasts, fisheries, research, and weather and climate, including satellites. From weather forecasts to fisheries management, NOAA provides decision makers with critically important data, products, and services that promote and enhance the nation's economy, security, environment, and quality of life. Providing insufficient funding for NOAA will only serve to diminish the economic activity and job creation that is at present successfully revitalizing communities across America.

We hope the subcommittee will see the benefits of investing in NOAA and the National Marine Sanctuary System, and that a failure to provide sufficient funding will endanger, quite literally, American lives and livelihoods across the nation.

¹ O'Connor, Simon *et al* (2009). Whale Watching Worldwide: tourism numbers, expenditures and expanding economic benefits, a special report from the International Fund for Animal Welfare. Prepared by Economists at Large. Available: http://www.ifaw.org/Publications/Program_Publications/Whales/asset_upload_file841_55365.pdf.

² Monterey Bay Crescent Ocean Research Consortium (2012) "Major Marine Sciences Facilities in the Monterey Bay Crescent-2012." Available: http://web.me.com/paduan/mbcore/Membership_Info_files/MontereyBayLabs2012-2.pdf

³ National Ocean Economics Program. (2004) "Ocean Economy Data." Available: <http://www.oceaneconomics.org/Market/ocean/oceanEconResults.asp?IC=N&selState=12&selCounty=12086&selCounty=12087&selYears=All&selSector=6&selIndust=All&selValue=All&cbMultiplier=Multiply&selOut=display&noepID=3204>.



March 18, 2013

The Honorable Frank Wolf
H-309, The Capitol
Washington, DC 20515

Dear Chairman Wolf:



As Congress begins negotiations on the Fiscal Year 2014 Commerce, Justice, Science, and Related Agencies Appropriations bill, we respectfully request that you prioritize programmatic requests for:

- **Marine Sanctuaries Construction Base**, within the National Oceanic and Atmospheric Administration's (NOAA) Procurement, Acquisition, and Construction (PAC) account **at a level of \$5.5 million**; and
- **Marine Sanctuary Program Base**, within NOAA's Operations, Research, and Facilities (ORF) account, **at a level of \$55 million**.



We are deeply concerned by recent proposals to terminate sanctuaries' PAC account, which would likely result in multiple, unfinished construction projects and prevent NOAA's Office of National Marine Sanctuaries (ONMS) from acquiring the vessels necessary to complete core research, education, and law enforcement missions that simply cannot be accomplished from land alone. Sanctuary PAC funds support direct job creation and economic growth through the construction and operation of vessels, visitor centers, and other facilities, and we strongly encourage you to oppose terminating PAC funds that provide critical links between our ocean and the millions of Americans who visit the coast each year.



Experience shows that national marine sanctuaries are vital to maintaining the healthy ocean ecosystems that underpin our incredibly productive coastal economies – and the return on our investment in sanctuaries is simply too valuable to ignore. For example, management of the Stellwagen Bank National Marine Sanctuary costs taxpayers only \$1.5 million annually and draws the tourists who spend over \$100 million per year on commercial whale-watching trips there. Furthermore, recent research has proven that sanctuary management can provide benefits to both ocean ecosystems and the commercial and recreational anglers who are critical to coastal economies. Sanctuaries are making essential contributions to marine ecosystem health and coastal job creation, and sufficient ORF funding will allow ONMS to sustain progress to date.



We are particularly concerned that ONMS has not received adequate appropriations in past budget cycles due to the program's increased responsibilities in FY14. NOAA's MPA Center, previously funded through the Coastal Management program, now resides within ONMS, and ONMS also has new responsibility for managing the Rose Atoll Marine National Monument, previously funded through the National Marine Fisheries Service, as part of the National Marine Sanctuary of American Samoa. We strongly encourage you to ensure that funding for these priorities is added to the base level for the Marine Sanctuary Program.



The impacts of sequestration are already projected to reduce vessel operations and maintenance funding to untenable levels and reduce ONMS' overall workforce by 5%. Closing visitor centers, eliminating research programs, diminishing enforcement capacities, and abolishing education initiatives will prevent ONMS from implementing sanctuary management plans – driven and informed by local communities and constituents – for yet another year. We strongly urge you to remedy this situation by supporting an overall appropriation of \$60.5 million for sanctuaries in FY14.



Thank you for your consideration of this request. We wish you all the best for the remainder of the 113th Congress.

Sincerely,



Jason Patlis
National Marine Sanctuary
Foundation

Charles N. Wiesen
Friends of Thunder Bay National
Marine Sanctuary

Jill Silver
Olympic Coast Alliance



Tom Lambert
Cordell Marine Sanctuary
Foundation

Lynette Poncin
Hawai'i National Marine Sanctuary
Foundation

George Neugent
Sanctuary Friends Foundation
of the Florida Keys

Chris Kelley
Farallones Marine Sanctuary
Association

Dennis Long
Monterey Bay & Channel Islands
Sanctuary Foundations

John Williamson
Stellwagen Alive!

Mr. WOLF. I was out at Monterey last year and I recall the burial at Arlington Cemetery, and the *Washington Post* did a couple of stories on this. It was very, very moving.

But thank you for your testimony.

Mr. Fattah.

Mr. FATTAH. Thank you for your testimony and for your fund raising and all the supports for these programs.

Mr. PATLIS. Thank you, Mr. Ranking Member.

Mr. CULBERSON. I just want to say thank you for the work that you do. The committee strongly supports what you are doing and also put in a plug, Mr. Chairman and Mr. Fattah, for ocean exploration for—I don't know if we got anybody here from them, but they do great work, Dr. Ballard and the Ocean Exploration—underwater mapping, it doubled the size of the United States and our natural resources overnight, just through some of the work that they are doing.

Mr. PATLIS. Thank you very much. Dr. Ballard is a Trustee Emeritus of the foundation as is Sylvia Earle and Jean-Michel Cousteau.

But again, the funding that NOAA sanctuaries receives is what we work with as a base, and then we can multiply that. And so the funds that you provide really allow us to do our job.

Mr. CULBERSON. Great work generates good will. Thank you.

Mr. PATLIS. Thank you very much.

Mr. WOLF. Thank you.

Mary Munson, Coastal States Organization.

Welcome.

THURSDAY, MARCH 21, 2013.

COASTAL STATES ORGANIZATION

WITNESS

MARY MUNSON, EXECUTIVE DIRECTOR

Ms. MUNSON. Good morning. Mr. Chairman, members of the subcommittee.

My name is Mary Munson. I am the Executive Director of the Coastal States Organization. We represent the governors of the nation's 35 coastal states on oceans, coastal and Great Lakes resource issues. I thank you for this opportunity to testify.

As you know, we rely on our coastal areas for commerce, storm protection, recreation, energy, natural resources among many other things.

We support adequate and sustained funding for the federal/state partnership programs, and I have left out the actual numbers in my testimony to keep this under four minutes, but the Coastal Zone Management Program, the Coastal and Estuarine Land Conservation Program, Regional Ocean Partnerships and National Estuarine Research Reserves, they form a critical framework supporting the nation's coast.

These programs are a small portion of the budget, but provide dramatic results in coastal communities. They sustain coastal

economies and are a good federal investment. These grants are matched by the states and leveraged with private and local funds.

The U.S. economy is a coastal economy. The federal funding doesn't reflect it. The oceans and coast provide irreplaceable contributions to our economy and while only accounting for 18 percent of U.S. land area, coasts are home to 163 million people and almost 5 million businesses.

Coastal counties contribute \$8.3 trillion to the U.S. GDP and employ 66 million people in coastal and ocean dependent sectors such as ports, marine transportation, tourism, off-shore energy, you name it.

Today our coastal resources are at risk due to more intense storms, growing demand for the use, and an increase in natural hazards such sea level rise.

The Coastal Zone Management Act states partner with NOAA to balance the need to maintain productive coastal and ocean resources and the need for sustainable and resilient development of these coastal communities, and failure to invest in these key programs now means a greater economic spending in the future, likely at a time of emergency.

A couple of examples of the difference that federal funding makes in coastal communities. In 1999, Virginia, your state, in shaded oyster restoration efforts using \$1.5 million in federal support and additional leveraged funds to construct sanctuary reefs and oyster harvest areas and have paid off.

Between 2001 and 2011, landings increased from 23,000 bushels to 236,000 bushels, an increase in value from \$575,000 to \$8.26 million, just for that oyster restoration.

In Pennsylvania, the state continues to open its coastline to public access through federal coastal funding. In Philadelphia, a rehabilitative pier now hosts an average of 1,800 weekly visitors. The Lake Erie coastal zone has a newly constructed park, fishing pier, deck, walkway and that also enhances the lake's \$36 million sport fishing industry among other benefits. So it is demonstrated effects.

There are stories like this around the country showing on-the-ground benefits. Without national CZM program and federal funding support, the leverage funding would disappear and these programs wouldn't be possible.

CSO appreciates the subcommittees past support and we appreciate your care and consideration of our request as you move forward with the appropriations process.

Please see our written testimony for more details, but I appreciate your time and we look forward—we are having our annual meeting in the fall in Virginia in Norfolk, so we hope to see you there and thank you for your time.

[The information follows:]



**Official Written Testimony for programs under the National Oceanic and
Atmospheric Administration (NOAA) for Fiscal Year 2014**

**Submitted To
Subcommittee on Commerce, Justice, Science and Related Agencies
Committee on Appropriations
United States House of Representatives
Washington, DC**

**Submitted By
Coastal States Organization
Mary Munson, Executive Director
March 14, 2013**

The Coastal States Organization (CSO) is a nonpartisan, nonprofit organization in Washington, DC that represents the interests of the Governors of the 35 coastal states, territories and commonwealths. Established in 1970, CSO focuses on legislative and policy issues relating to the sound management of coastal, Great Lakes, and ocean resources and is recognized as the trusted representative of the collective interests of the coastal states on coastal and ocean management. For fiscal year 2014, CSO supports the following coastal programs and funding levels within the National Oceanic and Atmospheric Administration (NOAA):

Coastal Zone Management Program (§§306/306A/309)	\$67 million
Coastal and Estuarine Land Conservation Program	\$20 million
Regional Ocean Partnerships	\$10 million
National Estuarine Research Reserve System	\$22.3 million

The U.S. economy is an ocean and coastal economy. Although federal investment does not reflect it, the oceans and coasts provide an irreplaceable contribution to our nation's economy and quality of life. While only accounting for 18% of the U.S. land area, coastal areas are home to 163 million people and almost 5 million businesses. Home to coastal and ocean dependent industries including marine transportation, tourism, marine construction, aquaculture, ship and boat building, mineral extraction, and living marine resources, coastal counties contribute \$8.3 trillion to U.S. GDP and employ 66 million people. If these coastal counties were their own country, they would have the world's second largest economy. Coasts and oceans are visited by nearly half of all Americans, adding to their health and quality of life. The non-market value of recreation alone is estimated at over \$100 billion. Every American, regardless of where they live, is fundamentally connected to U.S. coasts, oceans, and Great Lakes. These valuable resources are a critical framework for commerce, public recreation, energy, and environmental health and merit robust investment.

Today, our nation's coasts are as vital for our future as they are vulnerable. As a result of their increasing recreational, residential, and economic appeal, we are exerting more pressure on our coastal and ocean resources. This demand, combined with an increase in natural hazards such as sea level rise, extreme weather and other flooding events, highlight the danger of losing these invaluable national assets. Despite the difficult budgetary times, adequate and sustained funding is needed to support the key programs that are on the front lines of this daily battle, the programs utilizing the advances in coastal and ocean science, research, and technology to manage our coastal and ocean resources for current and future generations.

Programs engaged in these important efforts and working to balance the protection of coastal and ocean resources with the sustainable development of the coasts include the Coastal Zone Management Program, Coastal and Estuarine Land Conservation Program, Regional Ocean Partnerships and National Estuarine Research Reserves. These programs reside within the National Oceanic and Atmospheric Administration (NOAA) and provide *direct* funding or services to the states, territories and regions to implement national coastal and ocean priorities at the state, local and regional level. These types of partnership programs account for only a small portion of the total NOAA federal budget, but provide dramatic results in coastal communities. Funding for these programs is very cost-effective, as these grants are matched by the states and are used to leverage significantly more private and local investment in our nation's coasts. Maintaining funding for these programs that provide on-the-ground services to our local communities and citizens is well worth the federal investment.

Coastal Zone Management Program (\$\$306/306A/309)

CSO recommends that these grants be funded at \$67 million, a consistent level with FY 2012 funding with a small increase to account for Illinois' entrance into the program. This funding will be shared among the 34 states and territories that have approved coastal zone management programs. Pursuant to the Coastal Zone Management Act (CZMA), states partner with NOAA to implement coastal zone management programs designed to balance the need to maintain productive coastal and ocean resources with the need for the sustainable development of coastal communities. States have the flexibility to develop programs, policies and strategies targeted to their state priorities while concurrently advancing national goals. Under the CZMA program, the states receive grants from NOAA, which are then matched with state funding and then often further leveraged with private and local funds. These grants have been used to support and enhance coastal economies by resolving conflicts between competing coastal uses, reducing environmental impacts of coastal development, and providing critical assistance to local communities in coastal planning and resource protection.

The CZMA state grants have essentially remained at an even funding level for a decade, resulting in decreased capacity in state coastal zone management programs and less funding available to communities. An increase to more than \$91 million would be necessary to reach *actual* level funding that accounts for inflation since 2001 and would provide an additional \$300,000 - \$800,000 for each state and territory. However, CSO recognizes that the current fiscal climate makes such an increase challenging. By maintaining current funding levels, states and territories would receive between \$850,000 and just over \$2,000,000 to carry out their coastal management programs based on a formula that considers shoreline miles and coastal population. Any increased funding would account for the addition of Illinois in January 2012 as a state with an approved coastal program. Under the CZMA grants formula, Illinois will be eligible to receive the maximum allotted funds of \$2,000,000. With an increase, states would not be penalized for the addition of Illinois into the national program and could focus on activities that support healthy coastal communities and economies such as responding to extreme weather, focusing on resilient recoveries to coastal hazards, addressing coastal water pollution, protecting and restoring habitat, planning with and educating communities, providing public access to the shore and adapting to changing sea and lake levels and the threat of increasing storms. The following are a few examples of activities in Virginia and Pennsylvania that CZM state grants have recently funded. These types of contributions, and more, can be found around the nation.

Virginia

- In 1999, Virginia CZM initiated oyster restoration efforts using over \$1.5 million and additional leveraged funds to construct more than 80 sanctuary reefs and 1,000 acres of harvest area. In 2007, as pressure mounted to open the sanctuary areas to harvest, Virginia CZM reconvened its partners and created an innovative rotational harvest and buy-back program for large oysters that were returned to the sanctuaries. The yield for this investment has been huge – 23,000 bushels worth \$575,000 in 2001 to 236,000 bushels worth \$8.26 million in 2011.
- The Virginia CZM Program has developed, produced and marketed a comprehensive map (Coastal Virginia Ecologically Valuable Areas) of ecologically valuable lands and waters to aid Virginia's coastal localities and partners in targeting high value areas for protection – focusing on those natural features of water and land critical to coastal ecosystem health and supports robust seafood production.
- Along the Eastern Shore, Virginia CZM is restoring eelgrass and reintroducing bay scallops to the 80-mile long barrier island lagoon system from which they had been extirpated since the 1930s. Reintroduction of bay scallops has and will continue to bolster the coastal economy through highly lucrative eco-tourism and recreational fishing. The eelgrass restoration provides habitat for crab, flounder and other commercially valuable species, contributes to improving water quality, and stabilizes the entire system by dampening incoming wave energy - all of which contribute to a healthier support system for commercially and recreationally valuable fish populations in this area.

Pennsylvania

- Pennsylvania continues to open its coastline to public access through CZMA funding. In Philadelphia, rehabilitation was completed on the previously dilapidated Race Street Pier to provide a new public access; an average of 1,800 weekly visitors have enjoyed its multi-purpose lawn, sky promenade, native plantings, and seating. Additional public access is being realized through CZMA funding of the expansion of the nearby Schuylkill River Trail. The Schuylkill Banks section of the anticipated 130 mile trail sees an average 19,000 user trips per week. Upcoming expansions will open access to new neighborhoods, residents, and visitors of Philadelphia. In Pennsylvania's Lake Erie Coastal Zone, CZMA is funding construction of Liberty Park fishing pier in Presque Isle Bay. The new steel pier, deck, and walkway will enhance Erie's \$36+ million sport fishing industry and provide new recreational opportunities for local inner city youth. An initial coastal program investment of \$45,000 to expand the new Washington Avenue Green Park leveraged over \$1 to develop the adjacent pier into a boardwalk, kayak launch, and enhance intertidal wetlands.
- CZMA funding supports the annual International Coastal Cleanup. An estimated 85,000 pounds of trash was collected in the Delaware Estuary and Lake Erie Coastal zones in 2011 alone. For the past six years, Pennsylvania has funded debris removal and outreach activities. Since then, over 3,000 concerned citizens have removed 257,878 pounds of trash from Pennsylvania land and streams that flow into the Delaware River. In the past decade, over 6,000 volunteers have collected more than 100,000 pounds from the Lake Erie shoreline and watershed.

Several years ago, a grant cap of approximately \$2,000,000 per state was instituted to allow for funding to be spread more evenly across the states and territories, so as to prevent most of the

funding from going entirely to the larger, more heavily populated states. Now, however, over half of the states have met the cap and no longer receive an increase in funding, despite increased overall funding for CZMA state grants since that cap was introduced. Since the cap was never intended to serve as a barrier to states receiving reasonable increases intended for all states, CSO recommends that the Subcommittee include language in the appropriations bill report that allows the cap to be exceeded when it is fair and consistent with the original purposes of the cap. To that end, CSO suggests language declaring that each state will receive *no less than 1% and no more than 5% of the additional funds over and above previous appropriations*. As was provided previously by the Committee, CSO also requests that language be included in the appropriations bill report that *directs NOAA to refrain from charging administrative costs to these grants*. This is to prevent any undue administrative fees from NOAA from being levied on grants intended for states.

Coastal and Estuarine Land Conservation Program

CSO requests the Coastal and Estuarine Land Conservation Program (CELCP) not be terminated, as has been previously proposed in the President's Budget. Authorized by Congress in 2002, CELCP protects "those coastal and estuarine areas with significant conservation, recreation, ecological, historical, or aesthetic values, or that are threatened by conversion from their natural or recreational states to other uses." To date, Congress has appropriated approximately \$255 million for CELCP. This funding has allowed for the completion of over 150 conservation projects, with more ready to go. CELCP projects in 27 of the nation's 35 coastal states have already helped preserve approximately 50,000 acres of the nation's coastal assets. All federal funding has been leveraged by at least an equal amount of state, local, and private investments, demonstrating the broad support for the program, the importance of coastal protection throughout the nation, and the critical role that federal funding plays in reaching the established goals of our coastal communities.

The conservation of coastal and estuarine areas is critical to both humans and the environment. These natural areas shield communities from devastation brought by coastal storms, protect coastal homes and businesses from sea-level rise and flooding, and filter pollutants to maintain water quality. These areas also provide shelter, nesting and nursery grounds for commercial and ecologically important fish and wildlife, protect rare and endangered species and allow access to beaches and waterfront areas. CELCP is the *only* federal program entirely dedicated to the conservation of these vital coastal areas.

The need for CELCP funding far exceeds federally appropriated funds in recent years. In the last three years, NOAA, in partnership with the states, has identified, deemed eligible, and ranked over \$270 million in projects with willing sellers and state funding match available. As demand for CELCP funding has grown, federal funding has not kept pace. Adequate and sustained support is needed to meet the demand of the increasingly high-quality projects developed by the states and submitted to NOAA. The importance of CELCP and natural barriers in preventing and reducing storm impacts was recognized in the wake of Superstorm Sandy, when these types of areas provided buffers and increased coastal resiliency in the face of storm surge, and ultimately included in the response packages from both the Administration and Senate. Eliminating an important and successful coastal conservation tool does not make sense. Therefore, we **request your support for minimally restoring funding at the FY 2012 enacted level for CELCP.**

Regional Ocean Partnerships

There is an ever-growing recognition that multi-state, regional approaches are one of the most effective and efficient ways to address many of our ocean management challenges. These approaches are producing on-the-ground results that are benefitting both the economy and the environment.

Federal investment in Regional Ocean Partnerships—representing every coastal state in the continental US and the Pacific and Caribbean islands—will enhance economic development, leverage state and non-governmental investments, increase employment opportunities in green technology, and foster sustainable use of our oceans, coasts and Great Lakes. To meet our ocean and coastal challenges, Governors have voluntarily established Regional Ocean Partnerships and are working in collaboration with federal agencies, tribes, local governments and stakeholders. Although their methods and approaches may differ, Regional Ocean Partnerships are working to address similar challenges and to enhance the ecological and economic health of the regions, and ultimately the nation. These bodies provide a vehicle to engage in multi-sector, multi-state decision making to benefit the ocean environment and our coastal and ocean-related economy.

\$10 million in grants for Regional Ocean Partnerships is needed as a step toward an adequate funding level. These competitive grants provide essential support for the development and implementation of Action Plans within each region. Regional Ocean Partnerships also request appropriation language stating that *10% of the total funding be divided equally among existing Partnerships for operating funds*. CSO feels that it is important to support the fundamental framework of these Partnerships to ensure that the Regional Ocean Partnerships become enduring institutions that can guide regional efforts over the long-term.

ROP funds allocated through the competitive grants process will support projects that address the priorities identified in the regions, and should be awarded and administered by NOAA. CSO and the Partnerships are in agreement that **this funding, however, cannot be at the expense of the Coastal Zone Management Act program funding**. The CZMA grants to the states provide the infrastructure and support that is foundational to the work of the ROPs. Any decreases to CZM funding for the purposes of increasing that of the ROPs, will only hamper the states' ability to implement national priorities as well as address regional priorities. As partnerships mature and form where needed, funding should increase to \$60 million as soon as possible in order to fully meet regional needs.

National Estuarine Research Reserve System

The National Estuarine Research Reserve System (NERRS) partners with states and territories to ensure long-term education, stewardship, and research on estuarine habitats. Atlantic, Gulf, Pacific, Caribbean and Great Lakes reserves advance knowledge and stewardship of estuaries and serve as a scientific foundation for coastal management decisions. This unique site-based program around the nation contributes to a systemic research, education and training on the nation's estuaries.

CSO greatly appreciates the support the Subcommittee has provided in the past. Its support has assisted these programs in working together to protect our coasts, support coastal economies, and sustain our local communities. We appreciate your taking our requests into consideration as you move forward in the FY 2014 appropriations process.

Mr. WOLF. Thank you very much for your testimony.

Mr. Fattah.

Mr. FATTAH. Thank you very much for your testimony.

Ms. MUNSON. Thank you.

Mr. WOLF. Thank you.

Next is David Bedford with Pacific Salmon Commission.

THURSDAY, MARCH 21, 2013.

PACIFIC SALMON COMMISSION

WITNESS

DAVID BEDFORD, CHAIRMAN

Mr. BEDFORD. Mr. Chairman, my name is David Bedford. I serve as a commissioner on the United States section of the Pacific Salmon Commission.

The commission was established in 1985 to oversee the implementation of the Pacific Salmon Treaty between the United States and Canada. In May of 2008, the United States and Canada reached an agreement on a new set of fishery regimes which would apply for the period 2009 to 2018.

Funding in the Department of Commerce for programs intended to fulfill national commitments reached under the treaty is approximately \$10.8 million in 2012. The references that I make is a sort of a base in my discussion here, would be to 2012, since that is something where we have a clear picture of what the funding level was.

The funding for the treaty is located in three lines in the National Marine Fishery Service budget or salmon management activities. The Pacific Salmon Treaty Line, the U.S. Chinook Agreement line, the 2008 Agreement line and then also the International Fisheries Commission line under Regional Councils and Fisheries Commissions.

The Department of Commerce principally funds programs conducted by the states of Washington, Oregon, Idaho and Alaska. These programs fulfill national commitments created by the treaty. The costs of those programs is very substantially greater than the allotted money that is in the NOAA base.

The NOAA base level of funding is, as I say, about \$10.8 million in the 2012 budget. We view that as being really a necessary figure moving ahead. We have, as a matter of course, have been forced to supplement that with other sources of revenue. At the 2012 funding level we think we can make ends meet, provided those other funding sources remain available.

The Pacific Salmon Treaty line item in particular was funded at about \$5.6 million. That supports the states and the federal agencies to conduct salmon stock assessment, fishery management programs and monitoring to implement the conservation and allocation provisions of the Salmon Treaty.

The Chinook Salmon Agreement line item is funded as approximately at \$1.8 million. This is a program for research and stock assessment. The grants are awarded out of this in a competitive process.

The International Fisheries Commission line under Regional Councils and Fisheries Commissions is funded at \$400,000. This pays for a bilateral salmon enhancement program on the trans-boundary rivers to rivers that rise in Canada and float into sea through southeast Alaska.

The 2008 Agreement line supports programs that were put in place with the 2008 Agreement that were necessary to drive that particular set of negotiations to a conclusion where the level of funding needed here is \$3 million.

The base annual treaty implementation funding of approximately \$5.6 million has remained essentially flat since 1985. The kind of program that is implemented under the Salmon Treaty is a good deal more sophisticated and elaborate than it was at that time.

We have much more greater demands now that we have endangered species concerns on the Pacific coast. We have much more intensive stock assessment, fishery compliance monitoring and technical support activities that have to be supported.

The states have had to apply to various sources, for example, the fisheries grants, Dingell-Johnson monies, state general funds, as sources to backfill what is really an insufficient federal appropriation.

The problem is that fisheries grants, for example, used to be in the NOAA budget but were eliminated a couple of years ago. Pacific Coastal Salmon Recovery has had appropriations language applied to it, but has limited its use and was originally, it had appropriations language each year that said it could be used for meeting obligations under the Pacific Salmon Treaty, but is now constrained from use for those sorts of purposes.

In any event, in looking ahead, we are troubled by how it is we will be able to fund the kinds of programs that the state conducts on behalf of the federal government, but we are hopeful that we will be able to accomplish that if we can maintain level funding.

The Fish and Wildlife Service measures the economic impacts of the commercial line and sport fisheries on the west coast and with the states that are implicated in the treaty between \$2 billion and \$3 billion a year.

The effect of implementation of the treaty is necessary to continue the kinds of benefits that we gather from the fisheries on the coast. To sustain those fisheries into the future, the treaty, again, is a conservation program that is intended to provide a continuing flow of benefits and is reasonably effective in accomplishing that, albeit there are certain restock conservation problems on the coast as well.

Again, to accomplish what it is the states are trying to do on behalf of the national level that we feel that flat funding at the 2012 levels would be a basic necessity.

This concludes my comments and I thank you very much for the opportunity to testify to the Committee.

[The information follows:]

**UNITED STATES SECTION
of the
PACIFIC SALMON COMMISSION**

U.S. Section Coordinator
7600 Sand Point Way N.E.
Building I, F.NWR2
Seattle, WA 98115
Phone: 206-526-4140
Fax: 206-526-6534

**TESTIMONY OF DAVID BEDFORD, ASSISTANT COMMISSIONER,
ALASKA DEPARTMENT OF FISH AND GAME
U.S. COMMISSIONER, PACIFIC SALMON COMMISSION
U.S. SECTION OF THE PACIFIC SALMON COMMISSION**

**BEFORE THE SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE AND RELATED
AGENCIES, COMMITTEE ON APPROPRIATIONS ON THE FY 2014 BUDGET FOR THE
NATIONAL MARINE FISHERIES SERVICE IN THE DEPARTMENT OF COMMERCE**

Mr. Chairman, my name is David Bedford, and I serve as a Commissioner on the United States Section of Pacific Salmon Commission (Commission). The Commission was established in 1985 to oversee implementation of the Pacific Salmon Treaty (Treaty) between the United States and Canada. In May of 2008, the Commission concluded bilateral negotiations that developed revised salmon fishing regimes for the period 2009 – 2018. The provisions of the new fisheries agreements were approved by the federal governments of the United States and Canada and are being implemented for the 2009-2018 period. Funding in the Department of Commerce budget for the programs intended to fulfill national commitments created by the Treaty was \$10,859,253 in the 2012 budget. Funding for the Treaty is located in three lines in the National Marine Fisheries Service budget for Salmon Management Activities: the Pacific Salmon Treaty line, the U.S. Chinook Agreement line, the 2008 Agreement line and in the International Fisheries Commissions line in Regional Councils and Fisheries Commissions.

The implementation of the Treaty is funded through the Departments of Commerce, Interior and State. The Department of Commerce principally funds programs conducted by the States of Washington, Oregon, Idaho and Alaska and the National Marine Fisheries Service. The costs of the programs conducted by the states to fulfill national commitments created by the treaty are substantially greater than the funding provided in the NMFS budget. Consequently the states supplement the federal Treaty appropriations from other sources including state general funds, Dingell Johnson grants, and Pacific Coastal Salmon Recovery. To maintain programs necessary to meet treaty commitments funding for 2014 at the 2012 level of \$10,859,253 may be sufficient provided that all of the other sources of funds remain available.

The Pacific Salmon Treaty line item of the National Marine Fisheries Service budget funded at \$5,622,690 provides base support for the states of Alaska, Washington, Oregon, and Idaho and the National Marine Fisheries Service to conduct the salmon stock assessment and fishery management programs required to implement the Treaty's conservation and allocation provisions for coho, sockeye, Chinook, chum, and pink salmon fisheries. Effective, science-based implementation of negotiated

salmon fishing arrangements and abundance-based management approaches for Chinook, southern coho, Northern Boundary and Transboundary River salmon fisheries includes efforts such as increased annual tagging and tag recovery operations, harvest monitoring, genetic stock identification and other emerging stock identification techniques.

The Chinook Salmon Agreement line item in Salmon Management Activities funded at \$1,836,563 supports research and stock assessment necessary to acquire and analyze the technical information needed to fully implement the abundance-based Chinook salmon management program provided for by the Treaty. The states of Alaska, Washington, Oregon, and Idaho, and the twenty-four treaty tribes conduct projects selected in a rigorous competitive process.

The International Fisheries Commissions line, under Regional Councils and Fisheries Commissions in the NMFS budget is funded at \$400,000 and provides the U.S. contribution to bilateral cooperative salmon enhancement on the transboundary river systems which rise in Canada and flow to the sea through Southeast Alaska. This project was established in 1988 to meet U.S. obligations specified in the Treaty and has been funded annually at \$400,000.

The 2008 Agreement line supports programs necessary to reach the agreement on revised fishery provisions between the U.S. and Canada in 2008. The level of funding needed for 2008 Agreement programs is \$3,000,000. The U.S. Commissioners view continued funding in the FY 2014 federal budget as necessary to address Chinook salmon conservation needs and to meet existing treaty commitments.

The core Treaty implementation projects included in the Pacific Salmon Treaty line, and the U.S. Chinook Agreement line under Salmon Management Activities as well as the International Fisheries Commission line under Regional Councils and Fisheries Commissions consist of a wide range of stock assessment, fishery monitoring, and technical support activities for all five species of Pacific salmon in the fisheries and rivers between Cape Suckling in Alaska to Cape Falcon in Oregon. The states of Alaska, Washington, Oregon, Idaho, the National Marine Fisheries Service (NMFS), and the 24 treaty tribes of Washington and Oregon conduct a wide range of programs for salmon stock abundance assessment, escapement enumeration, stock distribution, and fishery catch and effort information. The information is used to establish fishing seasons, harvest levels, and accountability to the provisions of Treaty fishing regimes.

The base annual Treaty implementation funding of approximately \$5.6 million has remained essentially flat since the early 1990's while the growing complexity of conservation-based, and Endangered Species Act compliant fishing regimes has required much more intensive stock assessment, fishery compliance monitoring, and technical support activities. In order to continue to fulfill the federal commitments created by Treaty, the states have had to augment federal funding with other federal and state resources. For example, additional funding has included federal Anadromous Fish Grants, federal Pacific Coast Salmon Recovery Funds (PCSRF), federal Dingell-Johnson dollars, and state general funds. However, alternative sources of funding have seen reductions or in some cases been eliminated. The Anadromous Fish Grants were eliminated in the federal FY 2010 budget. Uses of PCSRF monies were constrained in FY 2010 by new appropriations language and further constrained in 2012 by the NMFS. State dollars and Dingell-Johnson grants have been significantly reduced during the current economic downturn.

The U.S. Fish and Wildlife Service measures the economic impacts of commercial and sport fisheries for the states involved in the Treaty at approximately \$2-3 billion per year. Effective implementation of the Treaty is necessary to continue the federal Treaty conservation-based fishing regimes that contribute to the sustainability of salmon stocks, the significant number of jobs supported by the fisheries and the large economic return to the states and communities. To accomplish this funding is needed at the 2012 level of \$10,859,253.

This concludes the Statement of the U.S. Section of the Pacific Salmon Commission submitted for consideration by your committee. We wish to thank the committee for the support given us in the past. I will be pleased to answer any questions the Committee Members may have.

SUMMARY OF PROGRAM FUNDING FOR THE U.S.-CANADA PACIFIC SALMON TREATY

DEPARTMENT OF COMMERCE, **NATIONAL MARINE FISHERIES SERVICE:**

Pacific Salmon Treaty Line Item

<u>National Oceanic and Atmospheric Administration (NOAA)</u>	
National Marine Fisheries Service (NOAA Fisheries)	1,030,224
Alaska Department of Fish and Game	2,906,814
Washington Department of Fish and Wildlife	881,428
Oregon Department of Fish and Wildlife	540,589
Idaho Department of Fish and Game	263,635

Pacific Salmon Treaty line item	Total	5,622,690
International Fisheries Commissions line item (TBR) (Transboundary Rivers Agreement)		400,000
U.S. Chinook Agreement line item (LOA)		1,836,563
2008 Agreement line item		
Coded Wire Tagging (CWT) Improvement Program		1,500,000
Puget Sound Critical Chinook Stock Program		1,500,000
	Total	3,000,000
Total Dept. of Commerce – NOAA (including TBR)		10,859,253

Mr. WOLF. Thank you very much for your brief testimony.

Mr. Fattah.

Mr. FATTAH. Thank you for your testimony. This is a matter that the committee has been very supportive of in the past and we look forward to the opportunity to consider it again. Thank you.

Mr. WOLF. Edward Johnstone, Northwest Indian Fisheries Commission.

Welcome.

THURSDAY, MARCH 21, 2013.

NORTHWEST INDIAN FISHERIES COMMISSION

WITNESS

EDWARD JOHNSTONE, TREASURER

Mr. JOHNSTONE. Thank you.

Good morning, Mr. Chairman. My name is Ed Johnstone. I am a Quinault tribal member. I represent fisheries policy for the nation. I am also the treasurer of the Northwest Indian Fisheries Commission. I am here filling big shoes of Billy Frank, Jr. that asked me to come to provide this testimony. And the Northwest Indian Fisheries Commission is comprised of 23 tribes in Puget Sound, the Straits of Juan de Fuca and the Washington Coast.

I am here to testify on NOAA programs that are important to us such as \$110 million from NOAA's Pacific Coastal Salmon Recovery Fund. These funds are critical to the restoration of habitat that has been lost in mostly in the Puget Sound region, but the coast is also affected.

The work that is done in all these watershed is connected through ESA, through the requirements of ESA, the administration has also a thread connection with the Pacific Salmon Treaty and other forms, and the work that we are doing is critical work that is needed because the pace at which we are losing our river systems and corridors and habitat is being outpaced by the amount of money in the work that we can do. We got good restoration programs in place, but we don't have the money to, you know, to keep pace at the rate at which the people are coming to the State of Washington. Cities and counties and the states have to deal with all of this growth and it is backlogging on us and we are reaching out, we are trying to get the funding level at the high water mark of \$110 million, and that reflects that work that needs to be done.

And this work is on-the-ground work. All the river systems have recovery plans and this money goes to projects such as what we have at Quinault which is an Upper Quinault restoration. It is a hundred-year plan. It is millions of dollars. When we have got it all engineered and when we have the dollars to do the work, it is jobs in the community that support these local economies as well as the state.

The Pacific Salmon Treaty that was just presented to you by the previous speaker, we support that. All of the reasons that he had mentioned, including the Chinook annex, the \$7.859 million for the treaty and an additional \$3.0 million for the Chinook agreement, this is all critical work that has to be done in the integrity of the

color guard tag program and the data for fisheries management purposes is real critical. It not only fulfills commitment to the Canadians through the treaty, but it also helps fulfill the trust obligation that the United States has with us as treaty tribes.

The \$15.9 million for NOAA's Mitchell Act hatcheries, and these are predominantly on the lower Columbia River, we support those hatcheries. The production in those hatcheries are very vital to the treaty tribes and also to the Washington economy as a byproduct; \$20 million for NOAA's Regional Ocean Partnership, that is for a lot of this work that you hear from the Marine Sanctuary Program, is like work that we do as coastal treaty tribes. We do collaborate with the sanctuary and other entities to protect our areas, our treaty areas out in the ocean, as well as working with our neighbors in the communities.

The last thing I want to say has to do with the Treaty Rights at Risk paper that we brought back here into Congress and to the White House last year that talks about how our treaty rights are diminishing because of all of these issues that deal with the ability to recover salmon and it is at length in our written testimony and we appreciate the opportunity to come before you this morning.

[The information follows:]



Northwest Indian Fisheries Commission

6730 Martin Way E., Olympia, Washington 98516-5540
 Phone (360) 438-1180 www.nwifc.org FAX (360) 753-8659

**TESTIMONY OF EDWARD JOHNSTONE, TREASURER
 NORTHWEST INDIAN FISHERIES COMMISSION
 BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON
 COMMERCE, JUSTICE, SCIENCE AND RELATED AGENCIES
 ON THE FISCAL YEAR 2014 BUDGET FOR THE
 NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION
 March 21, 2013**

Mr. Chairman and members of the Subcommittee, thank you for the opportunity to provide testimony on the Department of Commerce Fiscal Year (FY) 2014 appropriations. My name is Edward Johnstone and I am the Treasurer of the Northwest Indian Fisheries Commission (NWIFC). The NWIFC is comprised of the twenty tribes that are party to the *United States v. Washington*¹ (*U.S. v. Washington*). We support funding for the National Oceanic and Atmospheric Administration (NOAA)/National Marine Fisheries Service (NMFS) and National Ocean Service (NOS) and identify four specific funding requests.

SUMMARY OF FY 2014 APPROPRIATIONS REQUEST

NWIFC Funding Requests:

- ❑ **\$110 million for the Pacific Coastal Salmon Recovery Fund (NOAA/National Marine Fisheries Service)**
- ❑ **\$7.859 million for the Pacific Salmon Treaty and the Additional \$3.0 million for the 2008 Chinook Salmon Agreement (NOAA/National Marine Fisheries Service)**
- ❑ **\$15.9 million for the Mitchell Act Hatchery Program (NOAA/National Marine Fisheries Service)**
- ❑ **\$20 million for the Regional Ocean Partnership Grants Program (NOAA/National Ocean Service)**

The NWIFC also supports the budget priorities and funding requests of the National Congress of American Indians.

Last year we brought to your attention an initiative that we have been pursuing – our Treaty Rights at Risk (TRAR) initiative. The treaty rights of the western Washington treaty tribes are in imminent danger. Specifically, the treaty-reserved right to harvest salmon is at risk. The danger exists due to diminishing salmon populations, which limits or eliminates our right to harvest. All of this is due to the inability to restore salmon habitat faster than it is being destroyed. Wild salmon and their habitat continue to decline despite massive reductions in harvest and a significant investment in habitat restoration.

¹ *United States v. Washington*, Boldt Decision (1974) reaffirmed Western Washington Tribes' treaty fishing rights.

Nearshore marine habitat is being lost, forests are disappearing, and water quality and quantity are declining throughout the Pacific Northwest. That is why we have asked the federal government to take charge of salmon recovery because it has the obligation and authority to ensure both the recovery of salmon and to protect tribal treaty rights. We have requested the federal government implement their fiduciary duties by better protecting salmon habitat. The federal government has a trust responsibility to the tribes and a duty to protect the tribes' treaty-reserved resources. The tribes' treaties are constitutionally-protected and by fulfilling these federal obligations and implementing our requested changes, we will recover the salmon populations.

Salmon has always been the foundation of tribal cultures, traditions and economies in western Washington. When our tribal ancestors signed treaties, ceding millions of acres of land to the United States government, they reserved fishing, hunting and gathering rights in all traditional areas. These constitutionally-protected treaties, the federal trust responsibility and extensive case law, including the *U.S. v. Washington* decision (1974), all consistently support the role of tribes as natural resource managers, both on and off reservation. In Washington State, these provisions have developed into a successful co-management partnership between the federal, state and tribal governments. This collaboration has helped us to deal with many problems, but still requires additional support to meet the many new challenges like air and water pollution and climate change.

The tribes are strategically located in each of the major watersheds, and no other group of people is more knowledgeable about the natural resources. Western Washington tribes are leaders in protecting and sustaining our natural resources. The tribes possess the legal authority, and the technical and policy expertise to effectively manage programs to confront the challenges that face our region and the nation. Tribes seize every opportunity to coordinate with other governments and non-governmental entities to avoid duplication, maximize positive impacts, and emphasize the application of ecosystem management. We continue to participate in resource recovery and habitat restoration on an equal level with the state of Washington and the federal government because we understand the great value of such cooperation.

Of particular interest to us is the Pacific Coastal Salmon Recovery Fund. This is a critical funding source to restoring salmon habitat. The PCSRF assists tribes in the implementation of salmon recovery plans and moves us in the direction of achieving the recovery goals, which is a direct request in our TRAR initiative. We also continue to advocate for a number of the National Ocean Policy initiatives that would support key federal, state and tribal partnerships. Our specific requests are further described below.

JUSTIFICATION OF REQUESTS

- **Provide \$110 million for the Pacific Coastal Salmon Recovery Fund**

The Pacific Coastal Salmon Recovery Fund (PCSRF) is a multi-state, multi-tribe program established by Congress in FY 2000 with a primary goal to help recover wild salmon throughout the Pacific Northwest and Alaska. The PCSRF supports projects that restore, conserve and protect Pacific salmon and steelhead and their habitats. PCSRF is making a significant

contribution to the recovery of wild salmon throughout the region by financially supporting and leveraging local and regional efforts.

The tribes' overall goal in the PCSRF program is to restore wild salmon populations. The key tribal objective is to protect and restore important habitat that promotes the recovery of ESA listed species and other salmon populations in Puget Sound and along the Washington coast that are essential for western Washington tribes to exercise their treaty-reserved fishing rights consistent with *U.S. v. Washington* and *Hoh v. Baldrige*². These funds support policy and technical capacities within tribal resource management departments to plan, implement, and monitor recovery activities.

It is for these reasons that the tribes strongly support the PCSRF. The tribes have used these funds to support the scientific salmon recovery approach that makes this program so unique and important. Related to this scientific approach has been the tribal leadership effort which has developed and is currently implementing the ESA-listed Puget Sound Chinook Recovery Plan approved by NOAA.

We support the restoration of PCSRF in FY 2014 to the \$110 million level. These funds have decreased over the past decade from the peak of FY 2002 of \$110 million. We continue to support the original intent of Congress that would enable the federal government to fulfill its obligations to salmon recovery and the treaty fishing rights of the tribes. Salmon restoration projects not only benefits fish populations and their habitat but provides much needed jobs for the local communities. This would continue to cover watershed restoration and salmon recovery work as well as fish hatchery reform efforts.

- **Provide \$7.859 million in funding for NOAA Pacific Salmon Treaty and the additional \$3.0 million associated with the 2008 Chinook Salmon Agreement**

In 1985, after two decades of discussions, the Pacific Salmon Treaty (PST) was created through the cooperative efforts of tribal, state, U.S. and Canadian governments, and sport and commercial fishing interests. The Pacific Salmon Commission (PSC) was created by the United States and Canada to implement the treaty, which was updated in 1999, and most recently in 2008.

The PSC establishes fishery regimes, develops management recommendations, assesses each country's performance and compliance with the treaty, and is the forum for all entities to work towards reaching an agreement on mutual fisheries issues. As co-managers of the fishery resources in western Washington, tribal participation in implementing the PST is critical to achieve the goals of the treaty to protect, share and restore salmon resources.

Adult salmon returning to most western Washington streams migrate through U.S. and Canadian waters and are harvested by fisherman from both countries. For years, there were no restrictions on the interception of returning salmon by fishermen of neighboring countries. The 2008 update of the treaty gave additional protection to weak runs of Chinook salmon returning to Puget

² *Hoh v. Baldrige* - A federal court ruling that required fisheries management on a river-by-river basis.

Sound rivers. The update provided compensation to Alaskan fishermen for lost fishing opportunities, while also funding habitat restoration in the Puget Sound region.

We support the Pacific Salmon Commission/U.S. Section's request of \$7.859 million. We also support their request of \$1.5 million for the Puget Sound Critical Chinook Stock Program and \$1.5 million for the Coded-Wire-Tagging (CWT) Improvement Program as required by the 2008 PST Chinook Annex Agreement. This funding covers the operation and maintenance costs for the hatchery augmentation programs. These programs were initiated in connection with the 2008 Chinook Agreement of the US/Canada Pacific Salmon Treaty as the conservation needs of these populations could not be met by harvest restriction actions alone. The funding also allows for continued maintenance and improvement of the coast-wide CWT program. This is essential for the sustainability and management of our fisheries resources.

- **Provide \$15.9 million in funding for NOAA Mitchell Act Hatchery Program**)

Salmon produced by the Mitchell Act hatcheries on the lower Columbia River are critically important in that they provide significant fish production for harvest opportunities for tribal treaty fisheries in the Columbia River, and for ocean and in-river recreational and commercial fisheries, including tribal treaty fisheries along the Washington coast. This hatchery production is intended to mitigate for the lost production caused by the hydropower dam system on the Columbia River. Overall hatchery production has been reduced from more than 100 million to fewer than 60 million fish.

We support the President's request of \$15.9 million for the Mitchell Act Hatchery Program. Funding is provided for the operation of 17 fish hatcheries with the release of between 50 and 60 million juvenile salmon and steelhead in Oregon, Washington, and Idaho. Providing adequate funding to maintain the current production levels from the Mitchell Act hatcheries on the Columbia River is important as this production supports coastal salmon fisheries and dampens the impact of Canadian fisheries under the terms of the PST Chinook Annex on Puget Sound and coastal stocks. Adequate funding will also allow these facilities to be retrofitted to meet current ESA standards as identified through the hatchery reform process.

- **Provide \$20 million for the Regional Ocean Partnership Grants Program**

The Hoh Tribe, Makah Tribe, Quileute Tribe, and the Quinault Indian Nation have deep connections to the marine resources off the Washington coast. They have pioneered cooperative partnerships with the state of Washington and the federal government in an effort to advance management practices in the coastal waters. However, to have an effective partnership, the tribes and their partners need additional funding. More specifically, our coastal tribes with treaty-reserved rights need funding.

The four tribes, the state of Washington and NOAA's National Ocean Service, through the Marine Sanctuary Program, have formed the Intergovernmental Policy Council (IPC), which is intended to strengthen management partnerships through coordination and focus of work efforts. Through this partnership, the entities hope to maximize resource protection and management, while respecting existing jurisdictional and management authorities.

The four coastal tribes and the state also wish to engage in an ocean monitoring and research initiative to support and transition into an ecosystem-based fisheries management plan for the Washington coast. This tribal-state effort would be in collaboration with NOAA and consistent with regional priorities identified by a regional planning body. Effective management of the ocean ecosystem and its associated resources requires the development of baseline information against which changes can be measured. This initiative will expand on and complement existing physical and biological databases to enhance ecosystem-based management capabilities. In turn, this will support ongoing efforts by the state and tribes to become more actively engaged in the management of offshore fishery resources.

The Regional Ocean Partnership (ROP) Grants program, within the National Ocean Service Coastal Management account, would be an ideal program to support tribal participation in this regional ocean planning body. Funding for this competitive grant program supports regional ocean partnerships, including coastal and marine spatial planning. For the tribes and state to conduct an ocean monitoring and research initiative off the Washington coast, they will need funding to support this effort. Regional ocean governance mechanisms facilitate the effective management of ocean and coastal resources across jurisdictional boundaries by improving communications, aligning priorities, and enhancing resource sharing between state, local, tribal and federal agencies. The efforts by the coastal tribes to form the IPC and to coordinate rockfish and deep sea coral research, habitat mapping and climate change considerations fits nicely with the ROP. Healthy oceans are essential if we value stable climates that will sustain our economies and our lives. Tribes must be partners in the efforts to research, clean up and restore the environment in order to deal with identified problems.

CONCLUSION

The treaties and the treaty-reserved right to harvest are the supreme law of the land under the U.S. Constitution. Some of the treaty tribes have had to give up even their most basic ceremonial and subsistence fisheries. For the sake of sustainable health, economies and the natural heritage of this resource, it is critically important for Congress and the federal government to do even more to coordinate their efforts with state and tribal governments. Tribes are key partners in the management of natural resources by virtue of treaty-reserved rights and our legal status as co-managers. We have all made a huge investment in the recovery of salmon and their habitat but it has not been enough.

We are sensitive to the budget challenges that Congress faces. However, we urge you to continue to support our efforts to protect and restore our great natural heritage and support our funding requests. Thank you.

Mr. WOLF. Thank you very much. I appreciate your testimony.
Mr. Fattah.

Mr. FATTAH. Thank you, sir, for your testimony and filling those big shoes. You did a good job.

Mr. JOHNSTONE. Thank you.

Mr. WOLF. Anne Miglarese with PLANETIQ. How do you pronounce the group's name? Do you know?

Ms. MIGLARESE. Planet IQ.

Mr. WOLF. Planet IQ.

Ms. MIGLARESE. Uh-huh.

Mr. WOLF. Welcome.

THURSDAY, MARCH 21, 2013.

PLANETIQ

WITNESS

ANNE MIGLARESE, PRESIDENT/CEO

Ms. MIGLARESE. Good morning. Chairman Wolf and other members of the committee, I want to thank you for the opportunity to present to you today.

I am not seeking any funding, but need the committee's leadership in supporting an innovative alternative to meet the atmospheric observation needs of this country, alternatives that have a stunning track record of success in the intelligence community.

Today more than 90 percent of the atmospheric observations that go into a weather forecast come from the satellites. As I am sure you are well aware, the GAO has recently published a report that said that there is likely to be a gap of 17 to 53 months and it will start as soon as next year.

Almost this exact same situation occurred 10 years ago in the intelligence community. At that time the nation was trying to build the next generation of federal government intelligence satellites called FIA. They were over budget and behind schedule and a serious risk to the intelligence community of flying blind around the globe.

The NGA implemented a risk mitigation contracting strategy at that time called ClearView which provided a steady stream of revenue for commercial satellite imagery companies in exchange for affordable and a consistent supply of high quality imagery data for both civilian and military purposes.

This was the Pentagon's risk mitigation strategy, one that not only served them well at that time, but one that continues today, a strategy that got a nascent U.S. industry off the ground, an industry that thrives today and is worth \$2 billion a year globally and is lead by a U.S. company.

Given the impending data gap, the purchase mile once again offers a superior approach, encouraging government agencies to purchase commercial data, satellite data where possible would, significantly improve our weather forecast accuracy even if the gap does not occur.

It would mitigate the risk of a harmful gap if it does occur, all with predictable, sustainable and lower costs of government in the

long run and provide private sector jobs in the U.S., high tech, high paying jobs.

Let me be clear, I am not proposing that NOAA get out of the satellite weather business. Instead, where possible, we suggest shifting the burden of some of the data requirements to the commercial sector just as the intelligence community has done.

Let the private sector put private capital to work. Let us take the risk of a failed launch or a sensor malfunction. We are willing.

Make no mistake, a business-as-usual strategy not only will tilt the odds towards a longer and more harmful satellite data gap this decade, but will also lead to similar or worse gaps in the future.

That old adage “if ain’t broke, don’t fix it” should ring loud and clear in your ears. This system is broke and doing the same thing the same way will not fix it in the short or in the long term.

My request of the Appropriations subcommittee is to require the National Weather Service to utilize cost effective commercial data purchases from U.S. industry at every opportunity, encourage the National Weather Service to use their anchor tenancy authority which has been on the books for twenty years but never used.

NOAA should implement a strategy to facilitate growth of the commercial weather data sector, much as NASA has helped nurture a burgeoning commercial space flight industry and NGA gave life to the commercial satellite imagery market. With downstream impacts that have given us Google maps and tens of thousands of private sector jobs, let us learn from history. Thank you.

[The information follows:]

**STATEMENT OF MS. ANNE HALE MIGLARESE
PRESIDENT AND CHIEF EXECUTIVE OFFICER
PLANETIQ**

**BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE
COMMERCE, JUSTICE, SCIENCE AND RELATED AGENCIES**

**ADDRESSING PROGRAM OVERRUNS AND THE LOOMING GAP IN WEATHER
AND CLIMATE DATA FROM SPACE UTILIZING A COMPETITIVE, COMMERCIAL
DATA PURCHASE APPROACH**

March 21, 2013

Chairman Wolf, Congressman Fattah and distinguished members of the Subcommittee: It is an honor for me to provide testimony to you today on the nation's looming gap in weather and climate data from satellites, and on a promising solution to this impending dilemma—a commercial data purchase model that is both cost-effective and creates jobs. I'll be speaking to you today about NOAA and the National Weather Service's requirements for data collection. We are not seeking funding, but need the Committee's leadership in supporting innovative alternatives to monolithic government satellites—alternatives that have a stunning track record of success in the nation's intelligence community.

First, I want to thank the committee for your leadership in addressing this national crisis. Chairman Wolf, under your guidance, the executive branch is hearing and heeding the message that weather data from space is vital to our very existence. Ranking member Fattah, your efforts to increase spending on weather forecasting, making it an urgent priority, are no doubt going to make a difference when this country faces the super storms in our future.

The well-documented delays and cost overruns that have plagued our nation's satellite programs have led to a likely gap in satellite data that threatens to leave the U.S. vulnerable to catastrophic weather events and insufficient climate monitoring at a critical juncture. A recent report by the Government Accountability Office estimates this gap at 17 to 53 months in duration, starting as soon as 2014.

Today I am here to present to you a solution to the nation's unprecedented loss of environmental data already underway, a solution that has precedent, provides an immediate relief valve to squeezed federal budgets, rapidly addresses the short-term shortage of satellite data, and in the long term assures an affordable and continuous source of high-quality observations.

The importance of satellite data to weather forecasts and early warnings cannot be overstated, especially at a time when extreme weather events with severe human and economic impacts are becoming more frequent.

Without observations from satellites that orbit our planet from pole to pole, we now know that the computer model which predicted Hurricane Sandy would slam into the Northeast U.S. five

days in advance would have instead showed the storm staying out to sea. As devastating as Sandy was, with many of our citizens just now starting on the long road to recovery, imagine for a moment how much worse it would have been without adequate advanced warning.

Sandy is not an isolated case. Many will remember the massive “Snowmageddon” storm in February 2010, which paralyzed a large portion of the eastern U.S. with 20 to 35 inches of snow. Here, too, satellite data played a crucial role in predicting the severity of the storm. According to one study, without the benefit of polar-orbiting satellite data, model forecasts five days out would have underestimated snowfall by 10 inches or more.

Weather forecasting, of course, is still an inexact science. But forecast misses, like last week’s “Snowquaster” no-show in Washington, D.C., have become fewer and farther between. Weather forecasts have improved dramatically in the past few decades thanks in large part to hard work by the dedicated professionals in the National Weather Service, advances in the science of modeling, improved scientific understanding of the Earth’s atmosphere, and faster computers.

However, even the most powerful and sophisticated models are only as good as the observational data fed into them. There is no hope of producing an accurate weather forecast for tomorrow, let alone several days from now, without precise and detailed measurements of temperature, pressure, humidity and other variables around the globe and from the Earth’s surface to the top of the atmosphere.

The advent of satellites revolutionized our ability to observe the three-dimensional atmosphere day and night. Today, more than 90% of the observational data that goes into weather models comes from satellites, and satellite data is a major reason that today’s five-day weather forecast is as good as a three-day forecast 20 years ago, and that today’s five-day hurricane track forecast is as good as a two-day forecast 30 years ago.

Yet our failure to ensure an uninterrupted supply of satellite observations threatens to roll back the accuracy and advanced warning we have come to depend on for protecting lives, properties, economies and critical infrastructure. Budget constraints, shifting priorities, scope creep, schedule delays and satellite program mismanagement have gotten us into this situation. It will take an innovative approach to get us out.

Fortunately, there is already a blueprint to follow. It was 10 years ago that the U.S. government, facing a growing need for a reliable and sustainable source of satellite imagery, embraced the data purchase model as an alternative to government-built-and-operated satellites. At that time, the nation was trying to build the next generation of intelligence satellites for satellite imagery called FIA (Future Imagery Architecture); they were dramatically over budget and behind schedule, threatening our nation with a gap in satellite imagery coverage to support the war fighter and other interest of the US government abroad.. The National Geospatial-Intelligence Agency’s ClearView contracts, which later evolved into NextView and then EnhancedView, provided a steady stream of revenue for commercial satellite imagery companies in exchange for an affordable and consistent supply of high-quality imagery for both civilian and military purposes. In this action the Intelligence community mitigated the risk of “flying blind” and the

nascent commercial imagery industry gained a foot hold, in what is now a robust international market.

It is ironic that today's national weather satellite systems are in the same posture as those of the intelligence community over a decade ago. Years later, we now know that the solution of investing in and fostering development of commercial data sources is a proven model of success.

Given the impending data gap resulting from government-built constellations, and the current economic climate where cost-effective solutions that create jobs are paramount, the data purchase model once again offers an attractive approach. Encouraging government agencies to purchase commercial satellite data where possible would:

- 1) Relieve the pressure on existing satellite programs that are grossly over budget and dramatically behind schedule;
- 2) Mitigate the risk of catastrophic gaps in satellite data;
- 3) Serve as an effective mechanism for reining in programmatic spending; and
- 4) Create new high-tech, high-paying jobs in the private sector in the US.

All with a predictable, sustainable and lower cost to the government in the long run.

Let me be clear: We are not proposing the government get out of the weather satellite business. Starting with TIROS-1 in 1960, the U.S. government has led the world in the development, launch and operation of Earth-observing satellites, and there are many valid reasons to maintain that capability. Instead, where possible, we suggest shifting the burden of some data requirements to the commercial sector.

Already the data purchase model has proven successful for the US Government in the areas of satellite imagery and satellite communications. In a budget environment which dictates cuts across the board, and where every dollar and man-hour matters, the data purchase model spreads satellite development and launch costs among private investors and user nations, while allowing an agency like NWS to focus more of its money and time on the crucial work of improving its modeling capabilities, which have fallen behind the Europeans and other countries, and on advancing forecast research.

Furthermore, the data purchase model represents a lower-risk alternative to traditional government-funded satellite programs that build and launch massive spacecraft with numerous sensors, where a delay in any one sensor creates a ripple effect that has expensive consequences for the program, agency and the country. Disaggregation using alternative sources—commercial data is one—allows a satellite program to better achieve its broader objective, which is to get the bulk of the sensors in space in a timely manner that avoids data gaps.

Moving away from the large, all-in-one satellite approach would also soften the blow of launch failures or in-orbit mishaps, which are a real and present danger despite the best intentions. History is dotted with satellite launches gone awry, and just recently we learned it was space debris that suddenly destroyed a Russian satellite earlier this year..

Incentivizing industry to respond to targeted data requirements brings small, agile and fast solutions to the problem, with lower costs and reduced risk. Ultimately, adoption of the data purchase model would secure a sustained flow of satellite data vital to the safety, well being and economic security of our nation.

When it comes down to it, we are going to pay for the satellite data required for accurate forecasts one way or another. On the current track, pushed off-course by delays that have resulted from the all-or-nothing approach to large satellite development, we are destined for an increased dependency on foreign data. The data purchase model features the dual benefits of saving the government money and stimulating job growth, while at the same time making sure the data is supplied by the U.S. space industry and emerging atmospheric data companies.

Make no mistake, a business-as-usual strategy not only will tilt the odds toward a longer and more harmful satellite data gap this decade, but also will lead to similar or worse gaps in the decades to come. Continuing to throw more money at the same problem in the same manner is not risk mitigation. Only a fundamental shift in the procurement model that leverages the technical expertise and nimbleness of the private sector can reverse this troubling trend in the timeframe needed to mitigate this impending gap.

Our request of the Appropriations Committee is to encourage the NWS to utilize cost-effective commercial data purchases from U.S. industry at every opportunity, and encourage the use of Anchor Tenancy legislation already in law for 20 years, the same approach that jumpstarted the commercial satellite imagery industry and was key to technology successes such as Google Earth and the explosion of online mapping. NOAA should follow this lead and facilitate growth of a commercial weather data sector, much as NASA has helped nurture a burgeoning commercial spaceflight industry in recent years.

Providing annual, competitive funding for U.S. weather data ventures—companies just like mine—will lower government costs, promote uninterrupted data streams, and spur private sector growth and competition in an emerging global market. Private capital is ready and waiting, but the government's inability to commit is what's holding back these job-creating funds.

My company, for example, is poised to launch a network of small satellites that will provide vital weather data to both government and private users in the U.S. and abroad, which will lower everyone's costs for this kind of information. We will use a technique called GPS Radio Occultation, which looks at the bending of GPS satellite signals as they pass through the atmosphere. The bending angle is directly related to the density of the atmosphere, from which we can calculate high-resolution soundings of temperature, pressure and humidity.

This is a highly precise type of data already ingested by U.S. and international weather models. In fact, this data has been shown to have the biggest positive impact on forecast accuracy for the least cost. Unfortunately, the satellite system that currently supplies this data is approaching the end of its lifetime, while planned replacements have been delayed, are insufficient to meet the stated needs of users around the world, will be flown by a foreign government as a science and research mission, and will cover only a small sliver of the United States.

Our data can be used to support a variety of federal mission requirements including more accurate forecasts of day-to-day weather, hurricanes, flood events and winter storms, as well as improved climate monitoring, increased data collection over oceans, and better space weather forecasts for the U.S. Air Force. In particular, because it is so precise, GPS radio occultation data from PLANETIQ satellites can be used by NOAA to calibrate its own satellites and improve their performance.

Especially noteworthy is the impact of GPS Radio Occultation data on hurricane forecasts. The high accuracy, resolution and frequency of this data has shown the ability to significantly improve hurricane track and intensity forecasts at the lead times required to efficiently and cost-effectively evacuate coastal areas. In addition to saving lives and protecting property, the cost-savings potential is tremendous, as the average annual cost of false-alarm evacuations (that is, evacuating areas that do not ultimately experience hurricane-force winds) is roughly over \$1 billion dollars.

We are exploring with NOAA obtaining an anchor tenancy contract, a special federal contracting authority granted to NOAA under the Space Commercialization Act that Congress passed in 1993 for situations exactly like ours. If we obtain such a contract from NOAA in fiscal year 2014, which would commit NOAA to purchasing weather data from us in the future, then at no upfront cost to the government we will have an operational constellation of 12 satellites in space providing full global coverage by 2016.

Again, there would be zero cost to NOAA during the next 2 years, and then a competitive annual subscription cost for NOAA to purchase the weather data we provide to all our customers around the world going forward for the term of the contract. Meanwhile, NOAA and other federal agencies like the Air Force would be assured access to these critical data years earlier, and at a much lower total cost, than if the government continues to rely solely on its monolithic satellites which continue to suffer from launch delays and cost overruns.

There are companies other than mine which also can provide specific advanced capabilities to NOAA on a commercial basis. So while I am telling you about what my company can do my main message to you today is that Congress, through its oversight of NOAA and the NWS specifically, has an opportunity to spark a new American industry of commercial sources for weather that can work in service to NWS to support their weather forecast mission.. Collectively we are an eager industry ready for takeoff, if you let us go forward.

Mr. WOLF. Thank you very much for your testimony.

Mr. Fattah.

Mr. FATTAH. Thank you for your testimony today.

Mr. WOLF. Next, Emily Douce, Marine Conservation Institute. Welcome.

THURSDAY, MARCH 21, 2013.

MARINE CONSERVATION INSTITUTE

WITNESS

EMILY DOUCE, CONSERVATION PROJECTS MANAGER

Ms. DOUCE. Mr. Chairman and members of the subcommittee, I want to thank you for the opportunity to testify on fiscal year 2014 appropriations in regards to the National Oceanic and Atmospheric Administration.

My name is Emily Douce and I represent the Marine Conservation Institute, a nonprofit conservation organization that identifies important marine ecosystems and advocates for their protection for us and future generations.

Marine Conservation Institute has become increasingly concerned about NOAA's oceans, coasts and fisheries programs as the growing cost to upkeep our weather satellites continues to grow.

We support maintaining funds for the full range of NOAA's activities. The oceans play a vital role in our nation's economy but without adequate funding for ocean and coastal and fisheries programs, the health of our oceans cannot be maintained.

The U.S. ocean economy contributes more than \$258 billion to our nation's GDP through fisheries and seafood production, tourism, recreation, construction and transportation. The first of the three programs I would like to speak about today is NOAA's Marine National Monument's program.

In 2009, three marine national monuments in the Pacific were established by President George W. Bush, protecting 195,000 square miles of marine habitat. These areas include some of the world's most pristine tropical islands and coral reef ecosystems. Using these remarkably intact tropical ecosystems who were developing an understanding of what healthy and productive places look like and help us identify negative impacts to marine ecosystems closer to home and shows us the benefit of restoration.

Without sufficient and sustained resources, NOAA cannot adequately protect these areas from illegal fishing, invasive species, vessel groundings and other threats. Continued budget cuts will reduce critical research and outreach grants to scientists and organizations and reduce opportunities for the U.S. to partner with other Pacific island nations to address the threats mentioned above.

Therefore, we recommend \$3 million for the Pacific Marine Monuments program in 2014.

The next program I will highlight is the Hawaiian Monk Seal Recovery Program. NOAA has a responsibility for reviving the population of the Hawaiian monk seal as it only resides in U.S. waters and is one of the most critically endangered marine mammals in the world.

Over the last fifty years the Hawaiian monk seal population has declined by 60 percent and only 1,000 individuals remain. There is reasonable hope for the monk seal if a small sub-population in the main Hawaiian islands can continue to grow. However, this population growth has generated increased conflicts with recreational fisherman who unintentionally hook or untangle these seals.

NOAA has made great strides in implementing the Monk Seal Recovery Plan in recent years. It has been conservatively estimated that 30 percent of the monk seals alive today are due to direct actions by NOAA and its partners.

However, we are concerned that funding for the monk seal has severely decreased in recent years. Lower funding levels have reduced field camps, hampered critical community liaison efforts and diminished research programs that develop mitigation measures for human seal interactions.

We strongly recommend moderately increasing funding by \$1 million to \$4.5 million in 2014 as a step towards the \$7 million recommended in the recovery plan.

The final program I will mention today is NOAA's Office of Law Enforcement. NOAA's Office of Law Enforcement is responsible for enforcing the laws that conserve and protect our Nation's fisheries, threatened and endangered species, and marine sanctuaries and monuments.

The office is also responsible for enforcing the United States international commitments to fight illegal, unregulated and unreported or IUU fishing.

NOAA's jurisdiction spans 3.4 million square miles of marine environments with a Pacific region comprising half of that. As fish stocks decline worldwide, the threat of foreign poaching of U.S. fish stocks becomes greater, particularly in remote areas.

Officials estimate the global value of losses from IUU fishing ranges between \$10 and \$23.5 billion annually.

For domestic and international fish stocks to recover, strict regulations and increased enforcement must be put in place, particularly in remote areas like the Pacific Marine Monuments.

Marine conservation institutes strongly supports \$67 million, a moderate increase of \$1.5 million for NOAA's Office of Law Enforcement. This will allow the program to maintain current capabilities while also providing modest additional funding to the Pacific region.

In summary, Marine Conservation Institute respectfully requests that this subcommittee maintain or slightly augment funding for the conservation side of NOAA, by the amounts discussed today and in my written testimony.

Thank you.

[The information follows:]



Emily Douce, Conservation Projects Manager

March 15, 2013

*The Honorable Frank R. Wolf, Chairman
Subcommittee on Commerce, Justice, Science, and Related Agencies
Committee on Appropriations
United States House of Representatives, H-307
Washington, DC 20515*

Mr. Chairman and Members of the Subcommittee:

Marine Conservation Institute, based in Seattle, WA, is a nonprofit conservation organization that uses the latest science to identify important marine ecosystems around the world, and advocates for their protection for us and future generations. Just as we have protected a significant portion of America's lands with parks and forests to conserve the wildlife and provide recreational opportunities for the public, Marine Conservation Institute believes that the same must be done for our oceans. I wish to thank the members of the subcommittee for the opportunity to submit written testimony on the FY 2014 appropriations in regards to the National Oceanic and Atmospheric Administration (NOAA). NOAA's satellite and weather programs are vital to alerting citizens about oncoming weather events; however these programs should not continue to be funded at the expense of NOAA's ocean and coastal activities. **Marine Conservation Institute supports \$26 million in additional funding (compared to previously enacted levels) to restore support to a select few ocean programs including the National Marine Sanctuary Program, Pacific Marine Monuments Program, Hawaiian Monk Seal Recovery Program, Law Enforcement Program, and the Office of Marine and Aviation Operations.**

As a member of the Friends of NOAA coalition, Marine Conservation Institute works with other supporters, stakeholders, and partners of NOAA to educate and inform interested audiences about the full range of NOAA activities, enabling the agency to more effectively carry out its responsibilities relating to our ocean and coasts, fisheries, research, and weather and climate, including satellites.

NOAA is one of the premier science agencies in the federal government and provides decision makers with critically important data, products, and services that promote and enhance the nation's economy, security, environment, and quality of life. According to the National Ocean Economics Program, the US ocean economy contributes more than \$258 billion to our nation's Gross Domestic Product through fisheries and seafood production, tourism, recreation, construction, and transportation. Additionally, over 2.7 million jobs in the US depend on the marine environment.¹ NOAA's programs are critical to protecting ocean health for sustained use and long term survival of its wildlife.

¹ National Oceanic and Atmospheric Administration. *Economics National Ocean Watch (ENOW)*. 2013. www.csc.noaa.gov/digitalcoast/data/enow (accessed March 4, 2013).

I would like to highlight a few programs that Marine Conservation Institute believes are essential to NOAA's conservation mandate.

National Marine Sanctuaries

National marine sanctuaries preserve biologically and culturally important areas of our nation's oceans for us and future generations. Presently, the Office of National Marine Sanctuaries (ONMS) is responsible for managing the nation's 13 marine sanctuaries and Papahānaumokuākea Marine National Monument in the Northwestern Hawaiian Islands.

Our marine sanctuaries support thousands of coastal businesses, protect underwater and maritime treasures, and provide ocean recreation, research, and education for the public. For example, more than 400,000 visitors to the Florida Keys sanctuary spent over 2 million person-days of recreational fishing in one year and spent \$274 million in nearby counties. In Massachusetts, over 700,000 tourists spent a total of \$126 million on commercial whale-watching trips to the Stellwagen Bank National Marine Sanctuary during 2008, supporting 31 local businesses and almost 600 jobs.²

Continued underfunding will force ONMS to cut treasured public access and recreation opportunities, cancel collaborative efforts with museums and universities, and dismantle successful education initiatives that benefit local communities.

Marine Conservation Institute recommends \$60.5 million in FY 2014. This amount includes \$55 million for the operations and research account, and \$5.5 million for the construction account. This would allow ONMS to better fulfill its responsibilities, particularly as ONMS is being asked to do more with less. For example, in 2013 the Marine Protected Area Center was subsumed by the ONMS and the National Marine Sanctuary of American Samoa was expanded by 13,580 square miles; however, additional resources have not been allocated to cover these responsibilities.

Pacific Marine National Monuments

Three marine national monuments (Pacific Remote Islands Marine National Monument, Rose Atoll Marine National Monument, and Marianas Trench Marine National Monument) were established in 2009 by President George W. Bush in the Pacific Ocean. Together with Papahānaumokuākea Marine National Monument (established in 2006), they protect approximately 331,797 square miles of spectacular marine habitat.

Compared to other marine ecosystems, the marine monuments ecosystems are relatively intact and rich in biodiversity. These areas include some of the most pristine tropical islands and coral reef ecosystems in the world and contain vast amounts of shallow-water reef-building coral

² National Oceanic and Atmospheric Administration. *National Marine Sanctuaries and Local Economies*. 2012 <http://sanctuaries.noaa.gov/science/socioeconomic/factsheets/welcome.html> (accessed June 8, 2012).

species, hundreds of fish species, and dozens of species of seabirds. Migrating fish, turtles, birds and marine mammals frequent the islands, including endangered and threatened green and hawksbill sea turtles and whales. Mostly uninhabited, the marine monument waters are relatively free from the problems plaguing many other marine ecosystems: over-exploitation, disturbance, and pollution. Using these remarkably intact tropical ecosystems, we are developing an understanding of what healthy and productive places really look like which is helping to identify negative impacts to marine ecosystems closer to home and showing us the benefits of restoration.

With the establishment of the monuments came the responsibility of developing and implementing appropriate management measures to adequately protect these biologically and historically significant areas. Without sufficient and sustained resources, NOAA cannot adequately protect these areas from illegal fishing, invasive species, vessel groundings and other threats. Continued budget cuts will reduce critical research and outreach grants to university scientists and non-government organizations; reduce opportunities for Pacific island students to enroll for a term in ocean science or conservation courses with renowned marine institutions (e.g. Scripps Institute of Oceanography) with the goal of recruiting and fostering careers in conservation in island communities; and lessen the United States' ability to share information and ideas with other Pacific island nations about monitoring climate change, conserving endangered and threatened species, and developing remote surveillance capabilities. Therefore, Marine Conservation Institute recommends \$3 million for the Pacific Marine Monuments Program in FY 2014.

Hawaiian Monk Seal Recovery

NOAA has responsibility for reviving populations of the Hawaiian monk seal, one of the most critically endangered marine mammals in the world. It is also the only marine mammal whose entire distribution range lies within our national jurisdiction; thus the US has sole responsibility for its continued survival. Over the last 50 years, the Hawaiian monk seal population has experienced a severe decline of 60%, and now the population is slightly more than 1,000 individuals. Various factors have contributed to the seal's decline including: human hunting of the species to near extinction in the mid-1800's; entanglement in marine debris; being hooked or entangled by fishing gear; loss of habitat for pupping and resting; and competition for food in the Northwestern Hawaiian Islands; to name a few.

There is reasonable hope for the monk seal if a small subpopulation in the main Hawaiian Islands can continue to grow. However, this population growth has generated increased conflicts with recreational fishermen who unintentionally hook or entangle monk seals. In 2012 alone, there were 15 confirmed hooking incidents, and three died as a result. Hostility toward the seal has become toxic in some communities, prompting at least four intentional seal killings on Kaua'i and Moloka'i in a little over a year.

This subcommittee's decision to more than double the program funds to approximately \$5.6 million in FY 2009 and FY 2010 allowed NOAA to make great strides in implementing the

monk seal recovery plan. It has been conservatively estimated that 30% of the monk seals alive today are due to direct actions by NOAA and its partners³. However, we are concerned that funding for the monk seal has severely decreased in recent years (a level as low as \$2.7 million in 2011). Furthermore, our analysis indicates that cuts to the monk seal program have been disproportionate compared to other marine mammal species under NOAA's jurisdiction.

Lower funding levels in recent years have already severely affected recovery efforts by reducing field camps essential for population monitoring and seal protection; hampering critical community liaison efforts to explore and explain the importance of the monk seal in Native Hawaiian culture; removing specialists who eliminate sharks preying on seal pups; and diminishing research programs that develop mitigation measures for fisheries interactions and other human-seal interactions. Marine Conservation Institute strongly recommends the subcommittee moderately increase funding to \$4.5 million in FY 2014 to begin to reinstate NOAA's lost capability to recover the species.

Law Enforcement

NOAA's Office of Law Enforcement (OLE) is responsible for enforcing the laws that conserve and protect our nation's fisheries, threatened and endangered species, and marine sanctuaries and monuments. The office is also responsible for enforcing the United States' international commitments to fight illegal, unregulated and unreported (IUU) fishing (also called "pirate fishing"), a practice that threatens to undermine global fish stocks, such as the Pacific tuna fishery in which the US participates. IUU fishing also affects US fishermen and fishing communities by reducing opportunities and prices for fish here at home.

NOAA's jurisdiction spans 3.4 square million miles of coastal and marine environments, including the nation's 13 marine sanctuaries and 4 marine national monuments mentioned above. The Pacific region alone poses a huge challenge for NOAA OLE because it covers 1.5 million square miles, nearly one half of the US Exclusive Economic Zone.

The most recent analysis indicates that the US commercial fishing alone contributed \$7.3 billion to the US Gross Domestic Product. However, over a quarter of the US fish stocks are over-exploited. Additionally, as fish stocks decline worldwide, the threat of foreign poaching of US fishing stocks becomes greater, particularly in remote areas. Officials estimate the global value losses from IUU fishing ranges between \$10 billion and \$23.5 billion annually. For domestic and international fish stocks to recover, strict regulations and increased enforcement must be put in place, particularly in remote areas such as the Pacific marine monuments.⁴

Marine Conservation Institute strongly supports \$67.1 million for NOAA's Office of Law Enforcement in FY 2014. This will allow OLE to maintain current capabilities, while also providing modest additional funding to the Pacific Region for the added responsibility of protecting the marine monuments from IUU fishing by foreign fleets.

³ McAvoy, Audrey "Feds – Efforts to rescue monk seals helping species" Associated Press in West Hawaii Today, January 26, 2012

⁴ National Oceanic and Atmospheric Administration *Illegal Fishing, Not in Our Ports*, 2012.

http://www.nmfs.noaa.gov/ia/iuu/portstate_factsheet.pdf (Accessed July 7, 2012)

Marine Operations and Maintenance

The Office of Marine and Aviation Operations (OMAO) operates NOAA's fleet of specialized ships to fulfill the agency's environmental and scientific missions. OMAO provides vessels for fisheries research, oceanographic and atmospheric research, and hydrographic surveys. Ships are also used for monitoring marine sanctuaries and monuments, and servicing the early warning tsunami and weather system equipment.

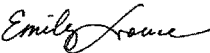
Not since 2007 has OMAO operated its ships at full capacity, largely due to budget constraints. In 2012, NOAA's 17 fully operational vessels were at sea for an average of 158 days each, which is about 72% of the fleet's operational capability (max = 220 days per vessel). However, NOAA's program offices had to 'buy' 19% of the total days-at-sea to fulfill some of their basic mandates. For instance, the National Marine Fisheries Service purchased 396 days in FY 2012.⁵ Unfortunately, the line offices are experiencing budget constraints as well.

A cut to OMAO (similar to the one proposed in the US House of Representatives in 2012) would drastically impact the current NOAA fleet and its mission requirements. For instance, OMAO would likely begin consolidating the fleet to 9 ships. A smaller fleet would likely eliminate approximately 220 staff positions and lead to the closure of the South Carolina homeport. Other impacts would include eliminating NOAA's only global class ship, as well as diminish NOAA's capacity to service DART (Deep-ocean Assessment and Reporting of Tsunamis) buoys, our best early warning system to protect lives and property from tsunamis. A substantial cut would also hinder NOAA's ability to meet important fishery management provisions of the *Magnuson-Stevens Fishery Conservation and Management Act* which support our fishing industry and communities and the *Marine Mammal Protection Act*.

It makes no sense for NOAA's ships to be partially idle when one of NOAA's primary missions is to manage and restore our oceans. Marine Conservation Institute supports \$166 million for OMAO in FY 2014. This is a step toward more fully funding NOAA's fleet in order to fulfill its mandates.

In summary, Marine Conservation Institute respectfully requests that the subcommittee maintain or slightly augment funding for the conservation side of the NOAA budgets by the amounts discussed above.

Respectfully,



Emily J. Douce

⁵ National Oceanic and Atmospheric Administration – *FY 2012 Fleet Allocation Plan*, 2012. <http://www.oma.noaa.gov/shipallocation.html> (Accessed July 9, 2012)

Mr. WOLF. Thank you for your testimony. I appreciate it.

Mr. Fattah.

Mr. FATTAH. Thank you very much.

Mr. WOLF. Kathryn Brigham, Columbia River Inter-Tribal Fish Commission.

Welcome.

THURSDAY, MARCH 21, 2013.

COLUMBIA RIVER INTER-TRIBAL FISH COMMISSION

WITNESS

N. KATHRYN BRIGHAM, CHAIRWOMAN

Ms. BRIGHAM. Good morning. And thank you for this opportunity to provide my testimony. I am a member of the Confederate Eight Tribes of the Umatilla Indian Reservation, I am the Board of Trustees Secretary for our governing body and the chairman of the Columbia River Inter-Tribal Fish Commission.

Our member tribes include the Yakama Nation, the Nez Perce tribe, Umatilla Tribes and Warm Springs tribes.

It is my pleasure to address you to them regarding programs that are important to our members tribes on the Pacific Northwest Salmon Management.

I will be covering funding for the Mitchell Act, the Pacific Salmon Treaty and Pacific Salmon Coastal Recovery funds. In addition, I want to let you know that we are working on a Columbia River Hatchery strategy and a request to have mass marking language reviewed.

Specifically, we are requesting \$26.6 million of the Columbia River Mitchell Act and \$10.8 million for the Pacific Salmon Treaty we support and \$90 million for the Pacific Salmon Coastal Recovery Fund to support on-the-ground salmon restoration activities.

Mitchell Act, in the 1930s the Mitchell Act was passed to provide mitigation for damages done to the fisheries by construction, existence and operation of the federal dams in the Columbia River.

Mitchell Act is being flat funded for many years and the funds have never adequately mitigated for the loss in tribal fisheries, but we currently support the \$26.6 million because of the 25 percent, \$6.7 million that the tribes use to rebuild natural salmon stocks.

As we said before, we support the Pacific Salmon Treaty's request, and then on the Pacific Salmon Coastal Recovery Fund. The Nez Perce tribe, and I want to show you this, but the Nez Perce tribe has a program and is a good example of how these funds are being used. The Nez Perce tribe is 100 percent federally— Pacific Salmon Coastal Funding and in the Clearwater, the coho have been declared extinct, and then because of these funds and this program, we now have 5,000 coho returning to the Clearwater.

The Columbia River Hatchery strategy, the Columbia River is working toward a unified Columbia River Hatchery strategy with our co-managers. Part of this strategy will rely on the best available science that is supported by adequate funding.

The overall goal is to meet tribal tributary rights and the listing of ESA stocks, prevailing laws and linking the agreements such as U.S. v. Oregon, the Pacific Salmon Treaty, and the accords.

Our goal is to get ESA off our back, which is to get to the stocks delisted so we can go back to managing our stocks for everyone to harvest in the Columbia River and its tributaries.

We request a review of the Salmon Mass Marking Program. A congressional requirement delivered through prior appropriation language to visibly mark all salmon produced in federally funded hatcheries should be reconsidered.

We have requested and we continue to request that the federal mass marketing requirement be reviewed to allow salmon managers in the Columbia River basin to have the latitude to make a decision on marking on a case-by-case basis that leads to a goal of delisting ESA stocks and meeting the federal trust responsibility to the tribes.

In summary, the four tribes have developed the capacity and infrastructure to lead and restore and rebuilding Columbia River Basin Salmon through collaborative efforts to protect our treaty reserved rights and we thank you and ask you for your continuing support.

And I want to assure you of this as well. This is the letter that we sent in 2011 asking that mass marking be reconsidered, and this is a referral that 41 tribes hooked together to develop transition for our tributary rights, rights protection funding.

[The information follows:]


COLUMBIA RIVER INTER-TRIBAL FISH COMMISSION

729 NE Oregon, Suite 200, Portland, Oregon 97232

503 238 0667

N. Kathryn Brigham, Chairwoman,
Columbia River Inter-Tribal Fish Commission
Testimony on Fiscal Year 2014 Budget
Appropriations Subcommittee on Commerce, Justice, Science and Related Agencies
United States House of Representatives
March 21, 2013

The Columbia River Inter-Tribal Fish Commission (CRITFC) is pleased to share our views on the Department of Commerce FY2014 budget and has identified the following funding needs:

- **\$26.6 million for the Columbia River Mitchell Act hatchery program to implement reforms of which \$6.7 million (or 25% of the enacted amount) is directed to the tribes to enhance supplementation (natural stock recovery) programs;**
- **\$10,859,253 for the Pacific Salmon Treaty Program, of which \$9,014,253 is for the implementation of the 2009-2018 Agreement, and previous base programs, and \$1,844,000 is for the Chinook Salmon Agreement Implementation;**
- **\$90 million for the Pacific Coastal Salmon Recovery Fund to support on-the-ground salmon restoration activities**

BACKGROUND: The Columbia River Inter-Tribal Fish Commission (CRITFC) was founded in 1977 by the four Columbia River treaty tribes: Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes of the Warm Springs Reservation of Oregon, Confederated Tribes and Bands of the Yakama Nation, and Nez Perce Tribe. CRITFC provides coordination and technical assistance to the tribes in regional, national and international efforts to protect and restore the fisheries and fish habitat.

In 1855, the United States entered into treaties with the four tribes¹. The tribes' ceded millions of acres of our homelands to the U.S. and the U.S. pledged to honor our ancestral rights, including the right to fish. Unfortunately, a long history of hydroelectric development, habitat destruction and over-fishing by non-Indians brought the salmon resource to the edge of extinction with 12 salmon and steelhead trout populations in the Columbia River basin listed under the Endangered Species Act (ESA).

Today, the CRITFC tribes' are among the most successful fishery managers in the country leading restoration efforts and working with state, federal and private entities. CRITFC has, and is currently updating, a plan that outlines principles and objectives designed to halt the decline of

¹ Treaty with the Yakama Tribe, June 9, 1855, 12 Stat. 951; Treaty with the Tribes of Middle Oregon, June 25, 1855, 12 Stat. 963; Treaty with the Umatilla Tribe, June 9, 1855, 12 Stat. 945; Treaty with the Nez Perce Tribe, June 11, 1855, 12 Stat. 957.

**Testimony of the Columbia River Inter-Tribal Fish Commission
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salmon, lamprey and sturgeon populations and rebuild the fisheries to levels that support tribal ceremonial, subsistence and commercial harvests. To achieve these objectives, the plan emphasizes strategies that rely on natural production, healthy rivers and collaborative efforts.

Several key regional agreements were completed in 2008. The Columbia Basin Fish Accords set out parameters for management of the Federal Columbia River Power System for fish passage. New agreements in *U.S. v. Oregon* and the Pacific Salmon Commission established fishery management criteria for fisheries ranging from the Columbia River to Southeast Alaska. The *U.S. v. Oregon* agreement also contains provisions for hatchery management in the Columbia River Basin. The terms of all three agreements run through 2017. We have successfully secured other funds to support our efforts to implement these agreements, including funds from the Bonneville Power Administration (BPA), the Department of Interior, and the Southern Fund of the Pacific Salmon Treaty, to name just few. Continued federal funding support is needed to accomplish the management objectives embodied in the agreements.

Columbia River (Mitchell Act) Hatchery Program: Restoring Pacific salmon and providing for sustainable fisheries requires using the Columbia River Mitchell Act hatchery program to supplement naturally spawning stocks and populations. To accomplish this goal, \$26.6 million is requested for the tribal and state co-managers to jointly reform the Mitchell Act hatchery program. Of this amount, \$6.7 million, or 25% of enacted funding, will be made available to the Columbia River Treaty Tribes for supplementation (natural stock recovery) programs. The Mitchell Act program provides regional economic benefits. NOAA – Fisheries estimates that the program generates about \$38 million in income and supports 870 jobs.

Since 1982, CRITFC has called for hatchery reform to meet recovery needs and meet mitigation obligations. In 1991 this subcommittee directed that “Mitchell Act hatcheries be operated in a manner so as to implement a program to release fish in the upper Columbia River basin above the Bonneville Dam to assist in the rebuilding of upriver naturally-spawning salmon runs.” Since 1991, we have made progress in increasing the upstream releases of salmon including Mitchell Act fish that have assisted the rebuilding and restoration of naturally-spawning upriver runs of chinook and coho. These efforts need to continue.

We now face the challenges of managing for salmon populations listed for protection under the ESA, while also meeting mitigation obligations. The Draft Environmental Impact Statement (DEIS) for operation of Columbia River basin hatcheries released by NOAA in 2010 illustrates the conundrum we face. While the DEIS, which assumes level funding for Mitchell Act hatcheries, points out the need for hatchery reform, the implementation scenarios for the proposed alternatives to the status quo all call for substantial reductions in hatchery releases. From the tribal perspective the proposed alternatives will not result in the delisting of salmon populations or meet mitigation obligations. Under the proposed alternatives the future is increased regulation under the ESA, resulting in more constrained fisheries along the west coast. The funding for the Mitchell Act program should be increased along with natural stock recovery program reform (supplementation) so that we can make progress towards ESA delisting. This would transition the Mitchell Act program to a much more effective mitigation program.

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We support hatchery reform to aid in salmon recovery, while meeting mitigation obligations. The CRITFC tribes are leaders in designing and managing hatchery facilities to aid in salmon restoration and believe similar practices need to be implemented throughout the basin to reform current hatchery production efforts. Additional funding is necessary to reform Mitchell Act hatcheries to accomplish conservation and mitigation objectives. Years of inadequate funding have taken a toll resulting in deteriorating facilities that do not serve our objectives.

Evidence to Support Tribal Salmon Restoration Programs under the Mitchell Act: The tribes' approach to salmon recovery is to put fish back in to the rivers and protect the watersheds where fish live. Scientific documentation of tribal supplementation success is available upon request. The evidence is seen by the increasing returns of salmon in the Columbia River Basin. Wild spring chinook salmon are returning in large numbers in the Umatilla, Yakima and Klickitat tributaries. Coho in the Clearwater River are now abundant after Snake River coho were declared extinct. Fish are returning to the Columbia River Basin and it is built on more than thirty years of tribal projects.

Once considered for listing under the Endangered Species Act, only 20,000 fall chinook returned to the Hanford Reach on the Columbia River in the early 1980's. This salmon run has been rebuilt through the implementation of the Vernita Bar agreement of the mid 1980s combined with a hatchery program that incorporated biologically appropriate salmon that spawn naturally upon their return to the spawning beds. Today, the Hanford Reach fall chinook run is one of the healthiest runs in the basin supporting fisheries in Alaska, Canada, and the mainstem Columbia River. For the fifth consecutive year, over 200,000 Fall Chinook, destined for the Hanford Reach, entered the Columbia River in 2012. Predictions are for an even higher return this fall.

In the Snake River Basin, fall chinook has been brought back from the brink of extinction. Listed as threatened under the Endangered Species Act, the estimated return of naturally-spawning Snake River fall chinook averaged 328 adults from 1986-1992. In 1994, fewer than 2,000 Snake River fall chinook returned to the Columbia River Basin. Thanks to the Nez Perce Tribe's modern supplementation program fall chinook are rebounding. Snake River fall chinook are well on their way to recovery and ESA delisting. Over 36,000 fall chinook made it past Lower Granite Dam in 2012. Approximately 11,000 of those fish were wild, twice the previous record return since the dam was constructed in 1975.

A Request for Review of Salmon Mass-Marking Programs: CRITFC endeavors to secure a unified hatchery strategy among tribal, federal and state co-managers. To that end, we seek to build hatchery programs using the best available science and supported by adequate, efficient budgets. A Congressional requirement, delivered through prior appropriations language, to visibly mark all salmon produced in federally funded hatcheries should be reconsidered. We have requested that federal mass-marking requirements, and correlated funding, be reviewed for compatibility with our overall objective of ESA delisting and with prevailing laws and agreements: *US v Oregon*, Pacific Salmon Treaty and the Columbia Basin Fish Accords².

² Bruce Jim, Chairman, Columbia River Inter-Tribal Fish Commission, Letter to U.S. House of Representatives Chairmen Frank Wolf, Mike Simpson and Doc Hastings, July 11, 2011

**Testimony of the Columbia River Inter-Tribal Fish Commission
FY 2014 Budget – Commerce, Justice, Science and Related Agencies**

Salmon managers should be provided the latitude to make case-by-case decisions whether to mark fish and, if so, in the appropriate percentages.

Pacific Salmon Treaty Program: CRITFC supports the U.S. Section recommendation of \$10,859,253 for Pacific Salmon Treaty implementation. Of this amount, \$9,014,253 is for the Pacific Salmon Treaty base program with Alaska, Oregon, Idaho, Washington, and NOAA to share as described in the U.S. Section of the Pacific Salmon Commission's Budget Justification for FY 2012. In addition, we support \$1,884,000 as first provided in 1997 to carry out necessary research and management activities to implement the abundance based management approach of the Chinook Chapter to the Treaty. The recommended amount represents the same level of funding as in FY 2012. Costs of the programs conducted by state agencies to fulfill national commitments created by the treaty are substantially greater than the funding provided in the NOAA budget. State agencies supplement the federal appropriation from other sources including state and federal grants, and the Pacific Coastal Salmon Recovery Fund, to the extent those sources are available.)

Pacific Coastal Salmon Recovery Program (PCSRF) / Watershed Restoration: Funding has been sought by the State of Alaska, the Pacific Northwest states, and the treaty tribes since the renewal of the Pacific Salmon Treaty in 1995 to serve critical unmet needs for the conservation and restoration of salmon stocks shared in these tribal, state, and international fisheries. The PCSRF program was developed in 2000 to contribute to the shared effort in accomplishing this goal. We recommend restoring the PCSRF FY2014 funding level to \$90 million. Long-term economic benefits can be achieved by making PCSRF investments on the ground to rebuild sustainable, harvestable salmon populations into the future.

The state and tribal co-managers have responded to concerns raised by Congress regarding accountability and performance standards to evaluate and monitor the success of this coast wide program. The co-managers have developed an extensive matrix of performance standards to address these concerns which includes the use of monitoring protocols to systematically track current and future projects basin-wide. Tribally sponsored watershed projects are based on the best science, are competently implemented and adequately monitored, and address the limiting factors affecting salmon restoration. Projects undertaken by the tribes are consistent with CRITFC's salmon restoration plan and the programmatic areas identified by Congress.

In summary, the CRITFC and its four member tribes have developed the capacity and infrastructure to lead in restoring and rebuilding salmon populations of the Columbia Basin. Our collective efforts protect our treaty reserved fishing rights and we also partner with the non-Indian community to provide healthy, harvestable salmon populations for all citizens to enjoy. This is a time when increased effort and participation are demanded of all of us and we ask for your continued support of a coordinated, comprehensive effort to restore the shared salmon resource of the Columbia and Snake River Basins. We will be pleased to provide any additional information that this subcommittee may require.

CRITFC contact: Charles Hudson, (503) 731-1257, hude@critfc.org

Mr. WOLF. Thank you for your testimony.

Ms. BRIGHAM. Thank you.

Mr. FATTAH. Thank you for your testimony. I am very sympathetic to some of the points that you have made. Thank you.

Mr. WOLF. Congressman Reed.

THURSDAY, MARCH 21, 2013.

WITNESS

HON. TOM REED, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. REED. Thank you, Chairman Wolf, Ranking Member Fattah. Thank you for allowing me the opportunity to testify before this Subcommittee on Commerce, Justice, Science and Related Agencies.

I wish to testify in support of two programs. First, the methamphetamine lab cleanup transfer from Community Orientated Policing Services at the Department of Justice of \$12.5 million to the Drug Enforcement Administration. I also will testify in support of the Advanced Hydrologic Prediction Service under the National Weather Service at the National Oceanic and Atmospheric Administration at the level of \$6,209,000 to adequately fund stream and rain gauges in the Chemung, Allegheny and Susquehanna River basins, the heart of which are located in my district, the 23rd Congressional District in Western New York.

The cleanup of meth sites is a costly and potentially dangerous process. Local law enforcement agencies cannot adequately address the cleanup of such sites using their own resources and require federal assistance to do so. Particularly since the communities in my district most affected by the impacts of abandoned meth sites are in rural areas with limited financial resources to address this issue, it is important that this transfer for meth lab cleanup is adequately funded in support of this need.

Formerly the COPS Meth Initiative provided grants to local law enforcement to engage in the cleanup of meth sites and also funded equipment and training for dealing with the impacts of methamphetamine on communities. The funding for meth enforcement and cleanup was reduced from \$40,385,000 in fiscal year 2010 to \$12,425,000 in fiscal year 2011, a reduction of 70 percent of the total funding from the previous fiscal year.

The current transfer of funding from the community orientating policing services to the Drug Enforcement Administration has now become a critical asset for communities affected by meth production and cleanup. This support must continue to ensure that local law enforcement has the tools and best practices available to safely clean up meth production sites.

On a second point, the Advanced Hydrologic Prediction Service represents a vital resource in our district in funding our nation's network of stream and rain gauges. Particularly in flood-prone regions these devices provide an early warning system when river levels begin to rise, giving communities the time they need to prepare for the possibility of flooding or to evacuate residents if needed. These prediction services help mitigate the economic damages

caused by flooding and are a critical indicator needed to avoid loss of life. In particular, I harken to my home town of Corning, New York in 1972 that suffered the devastating effects of Hurricane Agnes and caused widespread economic damage to my home community of Corning and also caused many injuries and deaths in 1972.

Earlier this year, 19 stream gauges and 7 rain gauges in New York State, operated by the United States Geological Survey, were in danger of being shut down as a result of lack of funding. Fortunately, the sites have shifted budgetary resources in order to ensure funding into June of this year, but more must be done to ensure these sites are properly funded for the long term.

Thank you, Chairman Wolf, Ranking Member Fattah, and members of this subcommittee for this opportunity.

Please let me know if I can follow up in any way whatsoever.

[The information follows:]

**Testimony for Fiscal Year 2014: Department of Justice and National Oceanic and Atmospheric
Administration
Submitted to the Subcommittee on Commerce, Justice, Science, and Related Agencies
Committee on Appropriations
United States House of Representatives
Washington, DC
Submitted by
Representative Tom Reed
March 21, 2013**

Chairman Wolf and Ranking Member Fattah, thank you for allowing me the opportunity to testify before the Subcommittee on Commerce, Justice, Science and Related Agencies. I wish to testify in support of two programs. First, the methamphetamine lab cleanup transfer from Community Oriented Policing Services at the Department of Justice of \$12,500,000 to the Drug Enforcement Administration. I also testify in support of the Advanced Hydrologic Prediction Service under the National Weather Service at the National Oceanic and Atmospheric Administration at \$6,209,000 to adequately fund stream and rain gages in the Chemung, Allegany and Susquehanna River basins.

The cleanup of methamphetamine sites is a costly and potentially dangerous process. Local law enforcement agencies cannot adequately address the cleanup of such sites using their own resources and require federal assistance to do so. Particularly since the communities most affected by the impacts of abandoned methamphetamine sites are in rural areas with limited financial resources to address this issue, it is important that this transfer for methamphetamine lab cleanup is adequately funded in order to support this need.

Formerly, the COPS Methamphetamine Initiative provided grants to local law enforcement to engage in the cleanup of methamphetamine sites and also funded equipment and training for dealing with the impacts of methamphetamine on communities. The funding for methamphetamine enforcement and cleanup was reduced from \$40,385,000 in Fiscal Year 2010 to \$12,425,000 in Fiscal Year 2011, a reduction of 70 per cent of the total funding from the previous Fiscal Year. This drop off in funding is representative of the previous practice of "earmarking" funds for methamphetamine cleanup. The current transfer of funding from the Community Oriented Policing Services to Drug Enforcement Administration has now become a critical asset for communities affected by methamphetamine production and cleanup. This support must continue to ensure that local law enforcement has the tools and best practices available to safely cleanup methamphetamine production sites.

The Advanced Hydrologic Prediction Service represents a vital resource in funding our nation's network of stream and rain gages. Particularly in flood-prone regions these devices provide an early warning system when river levels begin to rise, giving communities the time they need to prepare for the possibility of flooding or to evacuate residents if needed. These prediction services help mitigate the economic damages caused by flooding and are a critical indicator needed to avoid loss of life.

Earlier this year nineteen stream gages and seven rain gages in New York State operated by the United States Geological Survey were in danger of being shut down as result of lack of funding. Fortunately, the sites have shifted budgetary resources in order to ensure funding into June of this year but more must be done to ensure these sites are properly funded long term. In New York \$256,400 is needed to ensure these sites are funded for the remainder of the year, though the issue goes beyond this year alone. Similar funding constraints threatened the stream and rain gages in 2012 as well. I encourage the

Subcommittee to provide funding to the Advanced Hydrologic Prediction Service and to ensure that this program will provide adequate funding to stream gages to keep them operational year round.

Thank you Chairman Wolf, Ranking Member Fattah and Members of the Subcommittee for this opportunity. Please let me know if I can follow up in any way.

Mr. WOLF. Mr. Reed, thank you for your testimony.

Mr. REED. Thank you very much, Chairman.

Mr. FATTAH. This is nowhere near the Delaware River?

Mr. REED. No, we are further west, but it is very close, but that would be impacted by a similar situation with the rain gauges.

Mr. FATTAH. Thank you very much for your testimony.

Mr. REED. Thank you, Mr. Ranking Member.

Mr. WOLF. Thank you very much.

Nancy Colleton, Alliance for Earth Observations.

THURSDAY, MARCH 21, 2013.

ALLIANCE FOR EARTH OBSERVATIONS

WITNESS

NANCY COLLETON, EXECUTIVE DIRECTOR

Ms. COLLETON. Good morning, Mr. Chairman, Ranking Member Fattah. It is a pleasure being here.

As you said, I'm Nancy Colleton and I am representing this morning the Alliance for Earth Observations. I am here with a group of academic, business and also non-governmental organizations that help to allocate the importance of why we look at the planet, try to understand things with the science and technologies that you are able to do.

I am here this morning to deliver three key points. The first is to request that you support earth science and observing programs, funding for those programs since they are very important to the country.

And secondly, you consider that how we run we might strengthen the nation's investment in these systems like long-term planning, and again, making sure that the country has the tools and technology that it needs to better manage in the future.

And lastly, I would hope that we begin to look more and more at any national investment in these technologies and the science and also any investment in our economy. And I say that because when you look at \$12 million as an investment, the continued shorted value of our U.S. coast, for example, yet, we have an emerging ocean reserve system.

In 2012, insurance is looking at the insured losses for 2012 alone had \$58 million. U.S. crop losses just from last year, \$25 billion.

And so as we look at more and more and how we have to manage risks, whether you are managing a community, a company or your family, the need for information, the need for this intelligence is becoming more and more vital.

And you are going to hear from a number of our members, some of them are present here today to talk about the different serving systems, and you know, as we look at how we—we have been hearing about fisheries this morning, how vital it is to have information, we cannot manage what we cannot measure. So we need to measure to manage.

And lastly, I would say that as we move forward, we must also understand that the investment in these programs—and I know how difficult it is right now with all of these programs trying to,

requesting dollars, but \$3 million across 17 agencies to do the kinds of earth science and observations that we do to better understand our planet it is a relatively small investment when you juxtapose that against \$58 billion in losses last year.

So my message to you this morning is short. I won't take up my four minutes, but I hope it will be a clear message. Thank you very much.

[The information follows:]

TESTIMONY OF NANCY COLLETON

EXECUTIVE DIRECTOR, ALLIANCE FOR EARTH OBSERVATIONS

SUBMITTED ON MARCH 21, 2013

TO THE

HOUSE APPROPRIATIONS

SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES

HEARING ON THE FISCAL YEAR 2014 BUDGET

Chairman Wolf, Ranking Member Fattah, members of the Subcommittee, special guests, ladies and gentlemen, I am Nancy Colleton, executive director of the Alliance for Earth Observations. Thank you for the opportunity to speak today.

Since 2003, the Alliance for Earth Observations has helped bring together those that develop the tools to monitor the planet with those that need the information to manage it, serving as a link between the private sector, government and the general public. Through active stakeholder engagement and with members from the private sector, academia and non-governmental organizations community, we have worked to ensure the rapid and broad delivery of the timeliest, most comprehensive and accurate environmental information for improved decision-making.

In regard to the FY2014 budget, I am here today to request that the Subcommittee:

1. Support funding for Earth science and observing programs;
2. Strengthen the nation's investment through long-term planning; and
3. Recognize that this investment is essential to protecting and growing the U.S. economy.

Never before has our nation so heavily relied on or so sorely needed the science and technologies that enable us to understand and respond to our changing planet. Across the nation, we have seen and felt the impacts of severe weather events, droughts, and ocean and coastal changes.

Compared to other programs that you might be discussing today, the U.S. investment in Earth science and observations is relatively small given the context of events and sectors it serves. Estimated at an annual \$3 billion spread across 17 agencies, this amount and how it is managed is woefully inadequate to protect America's future. Consider the following statistics from Munich Reinsurance's U.S. Natural Catastrophe Update for 2012:

- *Insured losses in the United States in 2012 totaled \$58 billion—far above the 2000 to 2011 annual average loss of \$27 billion (in 2012 Dollars)*

- *Hurricane Sandy made landfall in New Jersey, becoming the worst storm to hit the northeastern United States since the Great New England Hurricane of 1938, and causing insured losses in excess of \$25 billion.*
- *Despite a relatively quiet year for tornadoes, insured losses from thunderstorm events exceeded \$14 billion, the second highest annual total on record.*
- *Severe drought crippled agriculture over a large section of the central United States.*
- *Dry conditions led to the most damaging wildfires in Colorado history.*

It is ironic that given these extreme events, their tremendous economic impact, and the fact that numerous respected institutions, such as the National Research Council and the Government Accountability Office (GAO), have repeatedly called attention to the decline of U.S. Earth monitoring capabilities, we have yet to see an increase in investment or a change in how that investment is managed.

It is vital that we address these issues now. Just two weeks ago, GAO added weather satellites to its high-risk list, citing concerns of a potential gap in weather satellite coverage of 17 to 53 months beginning in 2014. As reported broadly through the media these last few weeks, our nation has now fallen behind Europe in weather forecast modeling. The Reinsurance Association of America estimates the insured value of U.S. coasts at \$12 trillion, yet the country has only a small, emerging operational ocean-observing capability. Despite more than 60 percent of the continental US experiencing drought last summer, our national drought monitoring and forecasting capabilities continue to face funding challenges. Finally, while more and more national security experts identify climate change as a major threat to the US, the country has yet to establish an operational long-term forecasting capability.

Therefore, Congress should recognize the need to embark on a new era of environmental monitoring and forecasting and advance our weather, climate, ocean and land monitoring capabilities. This would protect American lives and property, reduce the cost of recovery from events like Hurricane Sandy, and strengthen and grow the economy – a priority we all share in light of the current fiscal constraints.

Our government-supported Earth science and observing programs benefit every American, every state, and – in one way or another – every business sector. Consider our nation's weather enterprise, an astonishingly successful combination of government and commercial capabilities. The National Weather Service provides the foundation for satellite and ground observations, computer forecast models, and basic services. Commercial companies expand on this to produce a wide variety of consumer and business services, ranging from daily weather on your mobile phone to precision wind energy forecasts saving utility ratepayers millions of dollars. This model should be actively facilitated in areas beyond weather, to include climate, ocean, and land observations.

Market-valuable environmental information products and services enable short- and long-term forecasting that gives U.S. business a strategic advantage. The faster and broader development of new products and services would support a variety of economic sectors,

from agriculture, tourism, and fishing, to infrastructure investment and alternative energy. With user demand for this information growing around the world, a clear business opportunity exists and, as the most technologically advanced nation in the world, the U.S. is poised to take advantage of it.

We must not forget that the environmental information supply chain begins with government investments in the foundational science programs within NASA, NSF and NOAA. Strategic investment in these programs will only be achieved through long-term planning. Because the benefits of a strengthened environmental information supply chain transcend science and impact the national economy, we believe it is essential for the Secretary of Commerce to be tasked with working with industry and government leaders to develop a national strategy for this business area.

As I hope my remarks have demonstrated, this Subcommittee's enduring commitment to sound science must be coupled with a commitment to expand and modernize our nation's Earth observing infrastructure. In the area of environmental information, a relatively small, strategic investment would go a long way to leverage the existing science investment, benefit U.S. business, spur economic growth, and create a more resilient nation.

On behalf of the members of the Alliance for Earth Observations, listed below, thank you again for the opportunity to testify today on this important subject.

- Atmospheric & Environmental Research, Inc. (AER)
- American Institute of Aeronautics and Astronautics (AIAA)
- Applied Physics Laboratory (APL) – The John Hopkins University
- Ball Aerospace & Technologies Corporation
- The Boeing Company
- Carbon2Markets – Michigan State University
- CARIS
- Center for International Earth Science Information Network (CIESIN) – Columbia University
- Computer Sciences Corporation (CSC)
- Center for Southeastern Tropical Advanced Remote Sensing (CSTARS)
- EADS Astrium
- Earth Networks
- GeoEye Foundation
- Harris Corporation
- ITT Exelis, Inc.
- The Consortium for Ocean Leadership
- The Planetary Society
- Raytheon Corporation
- Science Applications International Corporation (SAIC)
- Scripps Institution of Oceanography
- Southeastern University Research Association (SURA)
- University Corporation for Atmospheric Research (UCAR)
- Woods Hole Oceanic Institution (WHOI)

Mr. WOLF. It was a very clear message. Thank you very much.
Mr. Fattah.

Mr. FATTAH. Thank you very much. And obviously this committee has supported of host of observation techniques, whether satellites or the thousand land observation points for the National Weather Service or the National Science Foundation's observatory system and partnerships around the world, so the Chairman and I agree with you in many respects. Thank you.

Ms. COLLETON. Thank you, sir.

Mr. WOLF. Thank you.

Dr. Darrel Williams, Global Science and Technology.

THURSDAY, MARCH 21, 2013.

GLOBAL SCIENCE AND TECHNOLOGY, INC., NESDIS

WITNESS

DARREL WILLIAMS, Ph.D., CHIEF SCIENTIST

Mr. WILLIAMS. Good afternoon. Thank you, Mr. Chairman and members of the subcommittee for this opportunity to testify on the importance of this increased funding for the NOAA and NESDIS Comprehensive Large Array data-Stewardship System commonly referred to as NOAA and NESDIS CLASS program.

I am Dr. Darrel Williams, Chief Scientist at Global Science and Technology, Incorporated. We are headquartered in Maryland but we also have offices in Virginia and West Virginia, North Carolina and Colorado.

Prior to joining GST, I had a 35-year federal career at NASA Goddard Space Flight Center in the earth sciences director of ensuring scientific integrity of numerous earth observation methods. Thus, I appear before you today with a keen appreciation of the importance of the CLASS archive program.

So what exactly is CLASS? Class is a nationwide library archive, the home of NOAA's environmental data that is designed to consolidate, support the permanent secure and efficient long-term preservation and dissemination of our weather satellite data, the ocean observation data and earth environmental data.

When completing the CLASS archives, we have one of the largest archives in the world. The importance of CLASS archive is somewhat again in the Library of Congress archives, but CLASS is specifically focused on preservation of the nation's environmental data.

As for the uses of CLASS data, they consist of the weather and climate researchers who use the archives for a broad range of scientific, business and humanitarian applications. These efforts help to improve forecast capabilities which, in turn, results in saving lives and property. The archives is also used to better understand long-term trends, thereby assisting the government officials in making more informed decisions down the road.

For example, data collected during super-storm Sandy recently and Hurricane Katrina, are now in a CLASS archive for routine access by all users.

As for the size of the user base, we are talking about over 35,000 registered users representing organizations such as insurance com-

panies, legal groups, organizations involved in disaster recovery and related activities, as well as members of academia, U.S. and foreign government agencies.

However, we have major budget concerns for the sustainability of class in fiscal year 2014 and beyond. Over the past few years, the JPSS status and the GOES-R programs have provided 70 percent of the funding to build the system to meet their needs. Within two years, however, these funding sources will most likely be gone.

The core CLASS budget has never been increased above the baseline that was established in fiscal year 2002 at a level of about \$6.5 million. So again, I repeat, the baseline budget has been stagnant for over a decade.

CLASS will have inadequate baseline funding to support the growth and requirements that has been levied on the archive. We have already implemented significant staff cuts to the tune of 24 full time equivalents, 12 each over the last two fiscal years.

We are seeking an increase in baseline funding from approximately \$6.5 million to \$20 million per year.

In fiscal year 2014, the total funding needed is actually \$35 million to meet all the mandated needs and the \$15 million difference between the \$20 million in baseline and what we are asking for would have to come from JPSS and GOES-R, but as you are all probably aware, they are having funding issues of their own and so receipt of that \$15 million addition is not guaranteed.

Currently, there are no budget line items for sustainment of operations of maintenance, so these budget cuts, coupled with increased demands on the system pose a serious threat to the program's success.

In summary, the CLASS archive is critical to the U.S. government and to our citizens because it helps us to better understand and deal with the world we live in, including the development of more accurate and timely weather forecasts and predictions, better understanding of and planning for variable phenomena such as drought and widely fluctuating temperatures we have been experiencing in the last few years and supporting our goal of being a weather ready nation.

So on behalf of Global Science and Technology, I would like to thank you for your time and ask if you would please consider increasing support for the NOAA and NESDIS CLASS program.

Thank you.

[The information follows:]



Dr. Darrel Williams, PhD
Chief Scientist
Global Science & Technology, Inc.

The National Oceanic and Atmospheric Administration (NOAA), National Environmental Satellite, Data, and Information Service (NESDIS), Comprehensive Large Array-data Stewardship System (CLASS) is NOAA's premiere on-line facility for the distribution of NOAA and US Department of Defense (DoD) Polar-orbiting Operational Environmental Satellite (POES) data, NOAA's Geostationary Operational Environmental Satellite (GOES) data, and derived data. CLASS data is used by weather and climate researchers. **The CLASS data helps researchers improve forecasts that in-turn saves lives and property.** The data is also used to study long-term climate effects, and allows government officials to make informed decisions.

CLASS is designed to consolidate environmental data holdings into one very large distributed database. CLASS supports the long-term preservation and dissemination of NOAA's environmental data including: weather satellite data, ocean observation data, and earth resources data. The CLASS system provides critical support for NOAA's mission that includes weather and climate prediction. The system also provides data for the sustaining engineering for NOAA's weather satellite instruments and their data products. In order to maintain the system and accomplish the mission, it is recommended that the **NOAA / CLASS core budget for 2014 be increased to \$20M.**

For FY2012 and FY2013 the Joint Polar Satellite System (JPSS) and Geostationary Operational Environmental Satellite – R Series (GOES-R) programs provided 70% of the funding for CLASS. These programs are experiencing schedule and budget difficulties and have cut their contributions to the development of CLASS. In addition, due to funding contributions from JPSS and GOES-R the **CLASS core budget has not been increased since 2002** and this stagnation of the core budget has worsened the current situation. This has necessitated significant cuts to staff while at the same time the system is being required to ingest and disseminate more data than it is designed to handle. Further, CLASS data-holdings are expected to increase at an exponential rate due to increased data volumes from both near- and long-term NOAA weather satellite missions.

Current Status

Currently CLASS is holding 5.0 *Petabytes* growing at 2 *Petabytes* per year. After 2015, the growth will increase to 4 *Petabytes* per year.

- 1 *Petabyte* is equal to 1,000 *Terabytes*
- 1 *Terabyte* is equal to 1,000 *Gigabytes*
- 1 *Petabyte* is equivalent to 20 million four-drawer filing cabinets filled with text.

- CLASS is designed to ingest up to 5 Terabytes per day
- CLASS is also designed to disseminate and process up to 30 Terabytes per day
 - **CLASS currently disseminates 20 Terabytes per day**
 - **CLASS is expected to disseminate 30 Terabytes per day by mid-2013**
 - CLASS Data holdings are expected to increase by 1.8 Petabytes (1,800 Terabytes) more by 2013-2014
 - Primarily due to the Suomi NPP satellite mission. Suomi NPP is the first in a series of Joint Polar Satellite System (JPSS) Missions through FY 2015 and then increase more dramatically through FY 2017.
 - CLASS data holdings will increase by an additional PB per year after launches of GOES-R and JPSS 1 and the completion of data center migration
 - **By the end of FY 2016, CLASS will ingest 17 Terabytes per day and disseminating 96 Terabytes per day with more large datasets to come**

CLASS Users

CLASS data is used by weather and climate researchers through 1,755 active accounts. These accounts are responsible for all the data disseminated in the last six months. Active users also order data from CLASS and distribute it to other entities thereby increasing the total number of users by several hundred more.

- Total Registered Users: 35,000-plus
 - U.S. Government: DoD, DoJ, DoE, etc.
 - Foreign Governments: China, Russia, Europe, Asia, the Americas, etc.
 - Commercial: Insurance, legal, disaster recovery, energy, etc.
 - Academia
- Total Active U.S. Government users/volumes: 310 user accounts
 - 403 Terabytes/month; 2.4M files/year, 4.84 Petabytes/year
 - Largely consists of NOAA line offices including NWS, Los Alamos, CDC, USGS, Army, Navy, EPA, State Environmental Agencies, and Brookhaven National Laboratory
- Total Active Foreign Government users: 363 user accounts
 - 15 Terabytes/month; 83,000 files/year; .2 Petabytes/year
- Total Active Commercial users: 821 user accounts
 - 19 Terabytes/month; 106,000 files/year; 2.3 Petabytes per year
- Total Active Academic users: 261 user accounts
 - 6.3 Terabytes/month; 33,400 files/year; .08 Petabytes per year



Conclusion

The currently projected budget for CLASS in 2013 and beyond could put the system in what is being called a “doomsday” scenario where the program could fail to meet its mission objectives.

- **2013 -2018 Data Migrations to CLASS**

- Suomi NPP (2012): 5 Terabytes of data to CLASS per day or 1,800 TB (1.8 PB) per year
- GOES-R (2015) and GOES-S (2017): 4.5 Terabytes of data to CLASS per day each for GOES –R and GOES-S or 1,700 TB (1.7 PB) per year for each satellite
- JPSS-1 (2016) and JPSS-2 (2022): An additional 5 Terabytes of data to CLASS per day or 1.8 PB per year for each satellite
 - Does not include other “free flyer” and other missions that are yet to be defined or funded or increases in JPSS data products that are likely to occur
- Migration of 2,000 Terabytes (2 Petabytes) from NOAA data centers and a follow on daily rate of approximately 2 Terabytes per day to CLASS
- Additional Data
 - Data from other programs (NEXRAD Weather Radar, international satellites, etc.)
 - Archival of future Climate Model Data – To be determined and not included in forecast (Note: A single Climate Model data set can be as large as 1 Petabyte)

FY 13	FY 14	FY 15	FY 16	FY 17	FY 18
6.3 Petabytes	9.1 Petabytes	14.9 Petabytes	21.2 Petabytes	28.3 Petabytes	34.6 Petabytes

➤ **2010-2011 Budget:**

- \$27.2M
- Kept Staff and program stable -- no growth

➤ **2011-2012 Budget:**

- \$22.3M -- 12 people laid off
- Infrastructure and technical refresh of the system deferred.

➤ **Projected 2013 Budget:**

- \$19-20M – 12 more people have been laid off totaling 24
- Infrastructure improvements, technical refresh, critical development activities are deferred



- Infrastructure improvements and refresh to date total \$15M of deferred investments.
- **Projected 2014 Budget:**
 - Negotiations with JPSS and GOES-R underway
- ❖ If JPSS and GOES-R budgeted allotment for CLASS remains at current low levels and the FY 13 budget is not approved by congress, the 2014 projected budget of \$14M can be called a "doomsday scenario" as it would certainly devastate the program resulting in the loss of 40 more staff with the realization of a failure to meet commitments and a total loss of expertise that will take years to rebuild.



Mr. WOLF. Well, thank you.

I am trying to move it along, but I want to make a comment, though, and I don't want to do this to everybody else's testimony.

We are seeing the domestic discretionary squeezed and squeezed. And until there is a grand bargain, something along the lines, and I am speaking for myself now of Simpson-Bowles, this is going to continue, and these cuts are going to continue coming.

To even ask for an increase is just—I mean, I agree. I mean, all the witnesses have all been great witnesses. I wish the whole Administration and the Congress could have listened to you, but I think unless we do something grand and the Simpson-Bowles test, you got to raise the retirement age for Social Security. And I said it, okay.

So what happens? Nothing happens. I go into high schools and I ask the young kids how many of you believe the system is sound and will be there when you retire and in the last four years, from Langley High School in my district to the beautiful Shenandoah Valley, not one kid has raised their hand, so they know more than the Congress and the Administration.

And Simpson-Bowles says if you are 50, you got to work another month; 51, forget it, you are a free—51, 52, 53. If you are 40, another six months. And until we deal with these issues, the entitlement issues, these programs are going to continue to get squeezed. I mean, you will be back next year, but there will be exceptions, but there will be very little increases in anything because the domestic discretionary is just going like this, and in 2024 and 2025 when if we pray to the God that everyone out there is still alive, every penny that comes in, every penny, every penny that comes in will go for Medicare and Medicaid, Social Security and interest on the debt.

And the interest on the debt will be roughly \$9.2 to \$10 billion a week. Can you imagine what you could have with all that money. We owe China over a trillion dollars, so unless we do something grand and bold, these things are just going to come. I mean, it is just frightening what I see out there.

But I do appreciate your testimony and that is kind of for all the programs that are being said. We have got to reform these entitlements.

Thank you. Now, I am going to kick the can down the road.

Mr. WILLIAMS. I appreciate your difficult situation we are all in, frankly.

Mr. FATTAH. Yes, sir.

Mr. CULBERSON. Everyone of you will talk to your congressman and senators to save the entitlement programs from bankruptcy because once that happens, as Chairman Wolf says, that will free up money for investments in this community.

Mr. WOLF. Have you been following the news out of Cyprus?

Mr. CULBERSON. Yes, that is our future.

Mr. WILLIAMS. I know my PIN number. I will go get some money.

Mr. WOLF. Well, the banks aren't opening up until Tuesday.

But Dr. Cecil, Global Science and Technology.

THURSDAY, MARCH 21, 2013.

GLOBAL SCIENCES AND TECHNOLOGY, INC., NCDC**WITNESS****L. DEWAYNE CECIL, PROGRAM MANAGER, CLIMATE DATA RECORDS**

Mr. CECIL. Good afternoon and thank you very much. I appreciate your comments, Mr. Wolf, and thank you to the subcommittee members and staff, and I appreciate this opportunity.

My name is DeWayne Cecil. I have been with Global Science and Technology for a little over a year now as the program manager for the Climate Data Record Program on the contractors side at NOAA's national climatic data center in Asheville, North Carolina. That is after a 31-year career in the federal sector with NASA, NOAA, the U.S. Geological Survey and a 3-year stint with the U.S. Army during the Vietnam era conflict.

And I think I bring to the private sector which are related to your comments, Mr. Wolf, bring to the private sector a unique look at how can we better—and you have heard a couple of the witnesses talk about better coordination and observations across the federal sector. That is particular germane to your comments about, in these shrinking budgets and the environment that we are working in, how do we do a better job in the federal sector collecting these observations and making the information timely and relevant to decision makers in cities, states and regions.

So I will try to relate some of the things that we are doing at the National Climatic Data Center to help NOAA do that better.

Before I do that, I did a little bit of research before I came today because I am a scientist and so I looked at the populations of the states of all the subcommittee members and added them up with the best numbers I could get for now and it is about 145 million people that you represent on this subcommittee, about the half the nation's population. And so I am one person in four minutes, and so I really do appreciate the opportunity that I got to come here to talk to you today.

So in 2009 the subcommittee convened a hearing to hear about NASA and NOAA's work on better coordinating climate data records from satellites. And Dr. Tom Carl who is the director of NCDC in Nashville and Dr. Louis Uccellini who is now the Director of the National Weather Service for NOAA, came and chatted with you for quite some time and had a question and answer period. And from that hearing, you had appropriated some dollars to get this program started and so I just wanted to tell you that since that time we have, Global Science and Technology as a support contractor has helped NOAA at NCDC transition 12 climate data record sets, satellite climate data record sets from a research environment into an operational environment for decision support and I will talk a little bit about that in a few minutes.

But those research climate data records were predominantly from the academic sector and we work with institutions in most every state of the member of this subcommittee. They are the ones that produce the research codes and the data and we help NOAA then make those operational and we do that side by side with end

users so that it makes sense, it is in a format that they can utilize, they can build decision support around.

You have heard a couple of people testify about the marine sanctuaries. We are working closely with National Marine Sanctuaries to use satellite climate data information.

What this information is, is 30 to 40 years records into the past of satellites on a regional and global scale that we can help end users, whether they are water purveyors in Salt Lake Valley or they are farmers in Iowa or they are energy industry in North Carolina, we can help them use this information to make better informed decisions, not necessarily better decisions but better-informed decisions.

And so we want to be able to continue this program. We see some opportunities with the budget cuts that are happening, for instance just this week, the National Weather Service announced that the precipitation gauges, rain gauges in the historical climate reference network in the southwest region are going to be capped because of budget cuts because of sequestration. We can't get technicians out to take care of these gauges and collect the precipitation information. We see that as an opportunity to satellite information on a regional scale could perhaps help us get through those kinds of gaps, so we see it as a critical program to the country that NOAA has formalized with NASA and with USGS, and we really would like to have your continued support and appreciate the time today.

[The information follows:]



STATEMENT OF

L. DeWayne Cecil, Ph.D.

Climate Data Record Program Manager

Global Science & Technology, Inc.

HOUSE COMMITTEE on APPROPRIATIONS

SUBCOMMITTEE on COMMERCE, JUSTICE, SCIENCE, and RELATED AGENCIES

UNITED STATES HOUSE OF REPRESENTATIVES

MARCH 21, 2013

Introduction

Thank you, Mr. Chairman and Members of the Subcommittee for this opportunity to testify on the importance of awareness and support for the National Oceanic and Atmospheric Administration, National Environmental Satellite, Data, and Information Service, National Climatic Data Center, Climate Data Record Program (CDRP). I am Dr. L. DeWayne Cecil, Program Manager at Global Science & Technology, Inc. I have been at Global Science & Technology since January, 2012. Prior to joining GST I served the nation over a 31-year career in the federal sector with NOAA, NASA, the U.S. Geological Survey (USGS), and the U.S. Army. I appear, today, largely because of my responsibilities as the Climate Data Record Program Manager for GST with a keen understanding of NOAA's Climate Data Record Program for which we are strongly recommending a funding level for FY 14 of \$18M.

I am very appreciative of this opportunity to discuss the need to increase support for the CDRP. Climate Data Records (CDRs) are created by merging data from surface, atmosphere and space-based systems across decades. NOAA's Climate Data Records Program at the National Climate Data Center in Asheville, NC is focusing on data from satellites and from ground- and ocean-based (in-situ) observational networks. By applying knowledge gathered over time about satellites' performance and sensor characteristics and the performance of in-situ networks, the data are reprocessed to create consistent long-term records, allowing insight into changes in the Earth's environmental parameters, such as:

- Atmospheric and sea surface temperatures
- Snow and ice conditions
- Precipitation and clouds

Climate Data Records reveal the Earth's short- and longer-term environmental changes and variations, allowing scientists and decision-makers across society to better:

- Understand the weather and climate system
- Assess the state of the climate on regional, national, and global scales
- Project future climate states
- Inform economic decisions impacted by future weather and climate and extreme events such as the recent (December 2012) Superstorm Sandy

To accurately detect subtle environmental changes, it is vital that the measurements from different satellites be merged together and combined with appropriate data from in-situ observational networks and analyzed using proven scientific techniques. With changes and improvements to in-situ observational networks combined with a succession of satellites with different designs and changing performance qualities, combining all past and current observations into consistent long-term records is a major challenge. NOAA's CDRP addresses this challenge and provides authoritative and traceable long-term records for operation of decision support systems for thousands of stakeholders and partners. That is, these long-term climate data records have been transitioned from a purely research environment, through a systematic process that GST supports NOAA in at NCDC, to an operational basis where they are routinely used for decision support.

GST is helping NOAA develop this operational capability to reprocess archived in-situ and satellite data into long-term, consistent climate records that can be used by industry and scientists to understand and mitigate the impacts of climate variability and climate change. The results will provide trustworthy information on how, where and to what extent the land, oceans, atmosphere and ice sheets are changing. In turn, this information will be used by energy, water resources, agriculture, human health, national security, coastal community and other interest groups. Our CDR data will improve the Nation's resilience to environmental change and climate variability, maintain our economic vitality and improve the security and well-being of the public.

This Subcommittee was introduced to the satellite portion of the Climate Data Record Program in 2009 in a Hearing you convened. With this opportunity to speak with you, we are proud to report in the 3 years since that Hearing, that NOAA has successfully transitioned 12 Climate Data Records from research into an operational environment. An increasing number of stakeholders and users are now relying on the operational CDRs for energy and marine resource management, decision making, and near and long-term planning. Additionally, with routine availability of NOAA's operational CDRs, many stakeholders are improving their own decision processes and systems.

Specific examples of stakeholder engagement and usage of NOAA's operational CDRs are provided here in tabular form. In this table, I have listed the CDR, the sector utilizing these datasets, and the decision(s) that rely on utilizing these data.



Economic Sector, Industry, or Resource	Target Decision	Climate Data Record or Information
Energy	Sale/Purchase of Natural Gas	Outgoing Long Wave Radiation
Marine Resources and Fisheries	Management of National Marine Protected Areas and Commercial Fishing	Sea Surface Temperature (High Resolution)
Maritime Shipping	Ocean Shipping Routes in the Arctic	Sea Ice Extent
Operational Weather and Climate Services	Improved Forecasting and Prediction	Sea Surface Temperature (Low Resolution)
Coastal Resources, Infrastructure, Community Resilience	Hurricane Intensity Estimates, Rainfall estimates	Records Developed from Microwave Sensor data

The examples presented here affect multiple U.S. economic sectors and potentially affect the country's ability to respond to extreme weather events, protect infrastructure, and manage community growth. The decisions enabled by use of these example CDR datasets and associated products range from food and water resource management to the prudent utilization of a resource that is rapidly changing our nation's energy portfolio, natural gas.

But there are major concerns to the sustainability of the Climate Data Record Program in 2014 and beyond.

- (1) Over the last four years, NOAA's CDR Program conducted two competitive funding opportunities and awarded over 18 peer reviewed grants and contracts that will transition from research to operations over 50 additional operational CDRs. Any reduction in the budget will jeopardize this investment by not completing the transition to operations and losing the ability to sustain the new CDRs as well as the existing CDRs over time.
- (2) For the nation to fully realize the potential of utilizing a complete operational portfolio of CDRs and associated products, the funding level for the CDRP needs to be in the range of \$18-20M per year. The Program is currently funded at the FY12 level of approximately \$9M per year. One of the results of having to operate at FY12 funding levels has been significant cuts to GST staff and program expertise. The present funding level has also forced reductions in other competitive contracts and grant awards to the academic sector.
- (3) Any budget cuts to the CDRP would reduce the number of operational CDRs that could be supported. This would diminish the ability of business, industry and resource managers to continue to use operational CDRs for decision making and applications. Higher costs to the American taxpayers may occur due to the loss of the existing



operational CDRs (e.g. higher natural gas prices due to the lack of a 2-week forecast tool).

- (4) The nation's operational seasonal weather forecasts are provided by the National Weather Service's (NWS) Climate Prediction Center (CPC). Researchers at the CPC depend in part on data and records generated by NCDC's CDR Program. The loss or reduction of these data and records seriously jeopardizes our ability to respond to extreme weather and climate events.
- (5) A recent announcement by the NWS that precipitation gauges in the Historical Climate Reference Network throughout the southwest will be capped and no data will be collected due to budget cuts is actually an opportunity for our satellite precipitation CDRs and products to help fill a regional need for data for applications such as drought monitoring and response. This is especially relevant in the southwest. However, if the CDRP realizes further budget cuts from Congress, this application will not be fulfilled and there will be a serious gap in our understanding of and response to drought conditions in this area of the country.

Therefore, we respectfully request that in order to retain existing staff, fill critical staff shortages, maintain the existing operational CDRs and associated products, and develop essential new CDRs; we recommend that the CDRP core budget for 2014 be increased by \$10M annually.

We can't stress enough that by investing in the NOAA / NESDIS NCDC Climate Data Record Program we can significantly improve our understanding of the world around us allowing for more accurate and specific weather and climate forecasts and predictions and associated warnings and an improved understanding of the climate system as well as improved planning for responding to extreme events.

On behalf of Global Science & Technology; thank you so much for your time Mr. Chairman and members of the Subcommittee. We are grateful for this opportunity to request additional support for the NOAA / NESDIS NCDC Climate Data Record Program.



Mr. WOLF. Thank you very much.

Mr. CULBERSON. Where did you get that?

Mr. CECIL. The data is stored, you hear this concept of the cloud, it is stored out on servers on the cloud, I guess. This is actually servers at the National Climatic Data Center in Asheville, these data sets are. But there is some plan at some point to work with CLASS and have the data available that way as well.

Mr. CULBERSON. Yeah, I don't know how secure the cloud is, and I am frankly glad to hear that it is at servers that you control, publicly paid for, available to public.

Mr. CECIL. Yes. Yes.

Mr. CULBERSON. What are the Chinese using the data for?

Mr. CECIL. Hopefully they are using it to look at weather and climate extremes just like we are. Particularly on this program as a contractor, we aren't working with Chinese. We are working closely with companies that do work globally. We are working with an energy company that is using the satellite climate data records to buy and sell natural gas features and they depend daily on the projections that we make off these climate data records or NOAA makes off the climate data records.

Mr. CULBERSON. Because I saw that there is a—foreign government, China, Russia, Europe. You do have Chinese registered users.

Mr. CECIL. Yes, as far as I—I can check that for you. I am sure we do. I mean, it is an open public system. It is NOAA's computer system.

Mr. CULBERSON. Okay. Thank you, very much.

Thank you, Mr. Chairman.

Mr. WOLF. Thank you.

Admiral Lautenbacher, Southeast Coastal Ocean Observing Regional Association.

Mr. LAUTENBACHER. Yes, sir.

Mr. WOLF. Welcome back.

Mr. LAUTENBACHER. Thank you, sir.

THURSDAY, MARCH 21, 2013.

SOUTHEAST COASTAL OCEAN OBSERVING REGIONAL ASSOCIATION

WITNESS

**VICE ADMIRAL CONRAD C. LAUTENBACHER, JR., (USN) (RET.), BOARD
MEMBER**

Mr. LAUTENBACHER. Mr. Chairman—

Mr. WOLF. Where do you live now?

Mr. LAUTENBACHER. Well, I live in two places. I live in Atlanta mostly, but I also visit my grandchildren in Mineral Park, California. So right now I am in California.

You made it very cold for me today. This was a shock.

Anyway, thank you for the opportunity, Mr. Chairman, Mr. Fattah, and distinguished members of the committee and the hard-working staff I see sitting around here. It is a trip down memory lane.

I haven't heard much that I can't also support in spades, and particularly from you, sir, on the situation we are in, but I won't disappoint you. I am here to support increased funding and restoration of cuts that are creating problems with observing systems, particularly with a program called the Integrated Ocean Observing System, IOOS. I represent today the board and the Executive Committee of the Southeastern Coastal Ocean Observing Regional Association, SECOORA, known from Atlanta.

It is, if you will remember something I supported strongly when I was a new administrator and thanks to you and other members of Congress there is now a mandate which took what was a collection of member-interest programs in various parts around our coast, brought it together into a national program that is organized. It is integrated and provides what I would say a product that is unique in its way because it supports the national warnings and forecasts and weather systems, as well as providing detailed information for local harbors, ports, port authorities, the coast and all the rest of the Coast Guard, the Navy and FEMA in terms of emergency services.

So it represents a big addition to our ability to collect the data, and it is not only just a system which provides data. It is an end-to-end system, and it is designed for users, as I mentioned, for FEMA and the Navy and Coast Guard.

It is doing that today. It is taking these district pieces of hardware and people doing models who put it together in a coordinated network that is totally integrated. There is one data port in the southeast and it is completely integrated with the other 11 regional agencies.

And so for a small amount of money, relatively small amount of money, there has been big leverage in terms of our ability to have better warnings for the severe weather that we have had. And I just want to use two examples. My testimony has more in there, but in super-storm Sandy, for instance, Hoboken was submerged and a lot of those, 34,000 people were affected because of the flooding.

The models that were used and some of the data, not all of the data, that created the models, gave the Mayor the opportunity to warn people and evacuate that area and save a lot of lives. Came from the surge models that are produced by IOOS, not by the National Weather Services, although I am not here talking international weather service, and we need it all.

So 34,000 people, basically, had the opportunity to save their lives and all the automobiles left, so we have protection of life and property that made a big difference.

The Port Authority in New Jersey and New York were able to move something like 23,000 TEUs and deliver them somewhere else, so all of the goods that are needed. As you can certainly know, it is hard to supply New York City and that area with the kind of goods that keeps it going. It is a very consolidated area of people and services.

So it is in the deepwater horizon, it was the high frequency radars that provided the information on surface currents and allowed federal management authorities—that is an IOOS system that al-

lowed us to determine where the oil was going and predict models, so it is end-to-end service.

So let me close with, so what we are basically asking for is a restoration of money to the system that has been cut. We have had to put buoys in mothballs and reduce the amount of effort that produces the research that create the models to provide this warning for national security and for our economy, and an increase to help us harden the systems that we have today so that they are not going to be overcome as some of them were during the storms, and this is not just the east coast. This is the west coast. This is Great Lakes. It is the Pacific. It is all that.

Thank you, sir. I appreciate your time.

[The information follows:]

Statement Testimony of
Vice Admiral Conrad Lautenbacher (Ret),
Board Member of the South East Coastal Ocean Observing Regional Association (SECOORA)

Before the United States House of Representatives
Committee on Appropriations
Subcommittee on Commerce, Justice, Science and Related Agencies
March 21, 2013

Chairman Wolf, Ranking Member Fattah, and Members of the Subcommittee, thank you for the opportunity to appear before you today. I am Vice Admiral Conrad Lautenbacher (Ret), former Administrator of NOAA and a current Director on the Board of the South East Coastal Ocean Observing Regional Association (SECOORA). SECOORA is one of 11 regional observing systems partnered in the U.S. Integrated Ocean Observing System (IOOS).

I am pleased to testify in support of the U.S. Integrated Ocean Observing System (IOOS). Congress mandated this program in 2009, and significant progress has been made since then.¹ IOOS has proven uniquely capable of efficiently meeting our nation's needs for coastal and ocean observations, both now and for the future. In FY 14, we are requesting an investment of \$46.5 million for IOOS. This request includes:

- *\$6.5 million to support the U.S IOOS Program Office (administratively housed within NOAA's National Ocean Service) to serve central functions of system architect, coordination of the Federal agencies, standard development and program administration;*
- *\$40 million to support regional observing systems, including*
 - *\$25 million for the 11 Regional Associations to*
 - *continue operation of buoys, gliders, and other observing assets,*
 - *deliver of data and decision-support products, including nowcast/forecast models, and*
 - *upgrade operational capability for extreme event response,*
 - *\$5 million to sustain priority high frequency radar systems, and*
 - *\$10 million to support innovations in sensor technology.*

Together, the national program and regional systems are sustaining and working to upgrade our Nation's capability to deliver reliable ocean observations and products, including model innovations that support our Nation's weather forecasting enterprise.

Background

As the NOAA Administrator from 2001-2008, I oversaw the establishment of the U.S. IOOS Program Office, which is housed in NOAA, in recognition of our critical need for a reliable coastal ocean observing system to improve weather forecasting, facilitate safe and efficient marine operations, protect and maintain water quality, critical fish habitat and ecosystems, detect changes in our coastal ecosystems and coastal climate, and provide daily tactical support of

¹ Integrated Coastal Ocean Observing System Act of 2009

military operations worldwide.

IOOS is user-driven, science-based and policy neutral. It is a partnership of federal agencies, regional observing systems and the private sector that uses state-of-the-art data integration and communication to build a “system of systems” to provide timely and reliable information to those who depend on it for their lives and livelihoods.

I now serve on the Board of one of the 11 regional observing systems - SECOORA. SECOORA is a nonprofit operating in the marine waters of the southeast states of North Carolina, South Carolina, Georgia and Florida. We support operation of 12 offshore buoys, 15 high frequency radar systems, nine nearshore monitoring stations, and provide single portal access to most of the available real-time data being collected in the southeast. Additionally, our partners in the academic sector are providing nowcast/forecast models of ocean circulation, water level, currents, surge and inundation, and water quality. We include stakeholders from the private sector, academia, state agencies, marine operators, and federal agencies. Our outreach and product delivery meet the needs of an even broader array of decision makers including National Weather Service Weather Forecast Offices, recreational and commercial mariners and fishers, the U. S. Coast Guard, and coastal planners and managers, to name but a few. We are on the ground and efficiently operating to provide critical marine and coastal data that saves lives, protects property and provides jobs.

Our nation’s health, prosperity and security are directly linked to the ocean, making support for IOOS critical both now and for the future. U. S. IOOS is a unique national capability that has repeatedly demonstrated its value. This capability is necessary to meet our nation’s current and future needs for sustained ocean observations and products.

U. S. IOOS has been tested by extreme events and proven its worth. I provide three examples.

Superstorm Sandy: IOOS Responds to Extreme Events

We learned firsthand during Superstorm Sandy how important weather forecasts are – accurately forecasting the trajectory and **intensity** of these storms saves property and saves lives. Evacuating the wrong neighborhoods and communities costs between \$1 million to \$50 million per mile of coastline (Whitehead, JC 2003 Ocean and Coastal Management pm 1069-1083) but not evacuating leaves lives and property at risk. Decision makers at all levels, ranging from the private sector to US Navy Headquarters, relied on IOOS information.

IOOS supports marine transportation: Prior to landfall, the marine transportation industry began to make preparations based on forecast products derived from IOOS observations. In the Port of NY and NJ, all vessels were moved from anchorages in the Harbor. Many vessels were diverted from the Port of NY and NJ to other east coast ports that had the capacity to handle the cargo volumes and types. In just two ports, more than 23,000 TEUs were safely delivered and then trucked or shipped via rail to the NY-NJ metropolitan region. This ensured that the critical Christmas shopping season occurred without disruption. Further, 6700 containers were diverted to Virginia due to Hurricane Sandy. The cost estimate for these containers is approximately \$1 Billion (Marine Technology Society TechSurge Event 2012).

IOOS supports our military readiness: Navy's Atlantic Fleet Headquarters sorted approximately 80 ships out of Hampton Roads ports and shipyards at a cost of 10M 2-3 days prior to the onset of 50 knot sustained winds associated with Sandy. All safely exited with no damage or loss of life. NOAA advanced warnings from IOOS observations were deemed crucial to a safe evacuation in a timely and orderly fashion. Based on historic damage to the fleet from past hurricanes, a storm of Sandy's magnitude otherwise could have caused \$500M in damage to ships and pier facilities. Sustained winds of 50 knots or greater causes damage to both the pier and the ship (Marine Technology Society TechSurge Event 2012).

IOOS supports local communities: In Hoboken, New Jersey, 1,700 buildings were severely flooded, impacting up to 34,000 people. These people were spared discomfort, injury, or worse from advanced warnings provided by NOAA. All information came from (IOOS) high-resolution storm surge forecasts. The Mayor ordered an evacuation of "all ground floor apartments" by midnight Sunday night. This single decision saved a significant number of lives, because there are thousands of street-level and basement-level apartments in the city. The Mayor also advised against leaving cars in low-lying areas of town – advice that saved thousands of cars from damage, as any car left on all but a few streets in the city were at least partially submerged in salt water (Marine Technology Society TechSurge Event 2012).

IOOS supports the energy sector: Buckeye Partner Pipeline in NJ was the first utility company to come back online, within 48 hours. Per Patrick Hodgins, Houston –based Director, Buckeye Partners Pipeline was the only utility to use an industry service provider, Impact Weather (www.impactweather.com), to lead their prep work, which started 7 days prior. Impact Weather, like the vast majority of private firms, does not collect their own data but relies exclusively on NOAA products and services (Marine Technology Society TechSurge Event 2012).

Superstorm Sandy was unprecedented in its size and impact on the mid-Atlantic and northeastern regions of our country. We can all hope that this type of storm is not a new normal. Both before and during the storm U.S. IOOS provided critical data that helped emergency managers prepare to protect lives and property, and enabled scientists and weather forecasters to better understand the storm's track, intensity and the resulting storm surge.

However, our understanding and forecasts of hurricane and extratropical storm *intensity* must be improved. While significant gains have been made in recent years to forecasts of storm tracks, little improvement has been demonstrated over the past 20 years for storm intensity – **in large part due to a lack of real-time data along the storm paths**. Recent extreme events, including Superstorm Sandy and last year's Hurricane Irene, tragically reflect the need for enhancement of the nation's observing and forecasting capabilities to meet the growing demands for accurate predictions of impacts.

This FY 14 budget request will provide a small initial investment in extreme event readiness for each of the 11 IOOS Regional Associations. The critical infrastructure that supports the nation's readiness for the next extreme weather event, whether it's a hurricane baring down on the east coast, tsunami and flood on the west coast or extreme thunder storms in the Great Lakes region must be operational and ready to deliver. I am suggesting that we begin to make the necessary investment.

This request is in addition to funding of \$22.5 million that was requested through the Sandy Supplemental Appropriations Process to improve hurricane intensity forecasting in the five IOOS regions along the North Atlantic Storm Pathway. Assuming the funding appropriated by this Congress and initiated by this committee through H.R. 152 (\$25 million to improve weather forecasting and hurricane intensity forecasting capabilities, to include data assimilation from ocean observing platforms and satellites) is applied by NOAA in the regions (IOOS Caribbean, IOOS Gulf of Mexico, IOOS Southeast, IOOS Mid-Atlantic, and IOOS Northeast) to address hurricane intensity forecast improvements, then the additional funding we are requesting will begin to fill some of the most critical gaps in our national observing system, repair and upgrade aging systems that have been operating for over 10 years, and harden a portion of our communication systems to bolster reliability during events.

Deepwater Horizon Oil Spill

IOOS also demonstrated its value during the tragic Deepwater Horizon Oil Spill. The IOOS data management system rapidly and efficiently allowed for the seamless integration of data from non-federal sources for use by the Unified Area Command. Prior to this, valuable non-federal information collected by universities, state agencies or private companies was not assessable to federal responders. The IOOS data management system, based on interoperable standards and services, now allows for the integration of data from all relevant sources. In fact, approximately 75% of the data now served by NOAA's National Weather Service through the National Data Buoy Center is from non-federal sources, most of which is directly attributable to the work being done and supported by the Regional Associations.

Information on surface currents from regional radars and models were provided to NOAA to assist with their daily projection of the location of the oil slick. Much of the oil from the spill remained subsurface where, despite the availability of technology, we lacked the ability to readily monitor the flow of oil. IOOS, through its regional network, redeployed several underwater gliders from around the country to assist with subsurface monitoring efforts. This unique and flexible capability is one of the hallmarks of the IOOS system.

We must learn from these experiences and invest in critical observing assets so that when the next event – a spill, a hurricane, a flood - happens, we are able to provide emergency managers and others with the best possible information. Without this capability, response and recovery operations will be negatively impacted, and federal responders will be forced to deploy people and ships during the event at much higher cost, and with higher risks to lives and property.

Real-time Surface Current Information Aids Search and Rescue

One of the unique capabilities IOOS funding supports is the nation's surface current observing network, a system of land-based radars. These radar systems are able to detect the speed and direction of ocean currents regardless of cloud coverage. This information is relayed in real time to the Coast Guard's environmental data server for use in search and rescue operations. The results of a four-day test in July 2009 showed that when HF radar data were ingested into the Search and Rescue system, the search area was decreased by 66% over a 96-hour period. This decrease in search area represents significant savings, both in lives and decreased search and rescue operational cost. A National Surface Current Mapping Plan

estimates that \$20 million is needed to build out this system nationwide. Our request to maintain current funding levels of \$5 million will insure the priority radars currently operating continue to do so.

Wise Investment

An independent cost estimate of the IOOS system, conducted by the Jet Propulsion Laboratory Science and Technology Directorate and submitted to Congress on November 9, 2012, estimates that the *fully developed* system – federal and regional, including weather and ocean satellites - to address key societal needs in next 15 years cost \$54 billion. The regional component, as identified in regional build out plans, is estimated at \$534 million annually to fulfill needs of users for timely and quality information. At current funding levels for the regional systems near \$25 million a year, we are only beginning to build the capacity necessary to meet user demands.

Conclusion: IOOS Leads to Innovative Solutions

In tight fiscal times, IOOS provides a pathway for bringing forward new solutions, and will play an ever-increasing role in meeting our Nation's need for coastal ocean data and information. IOOS is a flexible system that can facilitate the transition from research and development to operations. IOOS's capability to move vital observing assets from research institutions into operations in support of federal response missions has been demonstrated, and will continue to be deployed to address unexpected events around the country. Regional observations are efficiently filling critical gaps not currently being met by our federal partners. IOOS is harnessing the flexibility and innovation of private and academic research and development capability.

The networked capability represented by IOOS works, and has repeatedly demonstrated its value. **IOOS is unique; IOOS is efficient; and IOOS is the future.**

In closing, I want to thank Chairman Wolf, Ranking Member Fattah, and Members of the Subcommittee for allowing me to provide input on fiscal year 2014 appropriations. I ask for the Committee's support for \$46.5 million for U.S. IOOS to assure the critical ocean observations, data communications, and modeling infrastructure needed to support our Nation's ocean and coastal decision-makers remains operational.

Mr. WOLF. And we thank you very much. I appreciate your being here.

Mr. LAUTENBACHER. My pleasure.

Mr. WOLF. Congressman Farr. Welcome, Sam.

THURSDAY, MARCH 21, 2013.

UNITED STATES CONGRESS

WITNESS

HON. SAM FARR, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. FARR. Thank you, very much, Mr. Chairman, Ranking Member Mr. Fattah who just left, and my good other Chairman, Mr. Culberson. Thank you for this moment to speak to you.

I come every year as Chairman Wolf knows with one plea and it usually starts with the map behind you that has got more blue than green. That map is here to remind members of Congress that 73 percent of the globe is ocean.

The U.S. government has more maritime domain because of all our responsibilities in the South Pacific and each of those with an exclusive 200-mile exclusive economic zone. We have more maritime domain than any other country in the world, even though countries like Indonesia have more coastlines.

This Committee has this critical responsibility with regard to the three big subject matters. It is interesting how the Department of Commerce, while we think of it mostly as our business department, most of the Department's budget is used to fund NOAA. Further, NOAA really has two components. It has the ocean and coastal programs and the atmospheric programs.

What has been happening is, because of all of our natural disasters, and I think the politics are appropriate in a sense, but we have been moving a lot more money and it is getting very expensive in the weather and atmospheric accounts. This is in part because NOAA is investing in very expensive equipment, and the satellite funding has increased by 59 percent since 2009 while funding for the National Ocean Service has decreased by almost 14 percent.

And as I said in Committee many times, we need to stop taking the "ocean" out of the National Oceanic and Atmospheric Administration. I noted once that we will just change the name to NAA. We won't have the oceans in NOAA anymore.

But in so many respects our oceans and our coasts are among our greatest natural resources and largest public trust. Our national economy depends on it.

In coastal states the highest economic region of those states is the coastline. For example, 80 percent of all of California's economy and wealth occurs along the coastline, an 1100-mile coastline. Ocean issues are big politics in California.

This Committee has served as the safeguard against the defunding of NOAA and the ocean and coastal programs in the past. For example, in 2010 \$12.4 billion was allocated to ocean and coastal programs across all federal departments and agencies. This represented about .33 percent of the total federal budget. This is

a relatively small investment, but it reaps incredibly great economic rewards.

In 2010 the ocean economy contributed \$258 billion to the U.S. gross domestic product. In 2010 the ocean economy supported 2.77 million jobs. In your state, Mr. Wolf, there were 116,000 jobs that were tied to the ocean economy in 2010. These Virginia-based jobs contributed \$6.7 billion towards the national GDP. I don't have it for Texas, but I do have it for Mr. Fattah's state. In Pennsylvania, there were 41,000 jobs tied to the ocean economy in 2010, and these jobs produced \$2.4 billion towards the GDP. I think Texas would be even larger because your coastline is so large and because of all of the shipping that goes in and out of your coastline more so than these other states.

So our national economy depends on continued funding for NOAA's ocean and coastal programs.

And I want to thank you again, Mr. Wolf, because you supported the amendment during the FY12 funding cycle, and I really appreciate that. That amendment added \$48 million back into NOAA's ocean and coastal programs. All it essentially did was take a one percent cut across the other accounts in order to fund these programs.

So these are the programs that are within the ocean responsibility of NOAA, they are the research and management of programs that are important.

We reauthorized the marine debris program because the Tsunami really brought a lot of debris to the Pacific coast. Representative Don Young worked really hard to address the docks and fishing boats that ended up on the Alaskan coastline and affected the fisheries there.

We have created a Regional Ocean Partnerships Program. We have created a Fisheries Habitat Restoration Program and an Education Program, a national Sea Grant College Program. And we have a lot of Sea Grant Fellows here in Congress working in different congressional offices.

I have a fellow named Noah working for me from NOAA under that program, under the Knauss Fellowship Program.

We have the Cooperative Research Program, the National Estuarine Research Reserve System, the Integrated Ocean Observing Program, and the National Marine Sanctuary Program.

We created a National Marine Sanctuary off the Monterey-Santa Cruz-San Mateo county coast and it is amazing how many people now want to come and learn about it. Fortunately, it spurred the ability to build the Monterey Bay Aquarium which helps interpret what is under the sea.

I mean what is so fascinating about the oceans is that when you look out at it, it is a two dimensional plane. We have to interpret the rest of it, the three dimensional aspect of it. Currently, we can do that better for the stars and the planets. However, the sanctuary program really allows us to understand what lies beneath the two dimensional surface of the ocean so that we can protect it.

A big issue on the west coast is the Pacific Salmon Protection Programs, and these programs are all the ones that we refunded in FY12. I hope that we will protect them again.

So I really appreciate your interest in this. Obviously the east coast here is very concerned about the impacts on Chesapeake Bay and the cumulative annual losses of degraded water quality over the last three decades. It has wiped out oyster reefs, it has meant a loss of \$4 billion to the economies of Virginia and Maryland.

So reducing NOAA's coastal and ocean funding has dire economic consequences for our constituents, and I would appreciate your leadership in protecting the ocean side of NOAA in this budget.

[The information follows:]

SAM FARR
20TH DISTRICT, CALIFORNIA

COMMITTEE ON APPROPRIATIONS

SUBCOMMITTEES:

AGRICULTURE, RURAL DEVELOPMENT, FOOD AND
DRUG ADMINISTRATION, AND RELATED AGENCIES
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Congress of the United States
House of Representatives
Washington, DC 20515-0520

1126 LONGWORTH HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-0520
(202) 225-2861

100 WEST ALISAL
SALINAS, CA 93901
(831) 424-2229

701 OCEAN STREET
ROOM 318
SANTA CRUZ, CA 95060
(831) 429-1976

www.farr.house.gov

March 15, 2013

TESTIMONY FOR THE RECORD OF
THE HONORABLE SAM FARR
BEFORE THE HOUSE APPROPRIATIONS
SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE,
AND RELATED AGENCIES

Chairman Wolf, Ranking Member Fattah, and Members of the Subcommittee, thank you for this opportunity to submit testimony and for your continued oversight and support of ocean science, conservation and education within the National Oceanic and Atmospheric Administration (NOAA).

Given the uncertainty in funding levels as a result of the timing of the President's FY14 budget, I want to use this opportunity to emphasize NOAA's critical services and programs that support the health of our ocean. During the FY12 appropriations cycle, Chairman Wolf and the full committee supported my amendment to restore \$48 million in essential funding to support NOAA's ocean and coastal programs. I call on you to continue to build on this leadership role by supporting the important programs encompassed within NOAA's Operations, Research, and Facilities (ORF) line using the FY12 allocations as a baseline for the 2014 cycle.

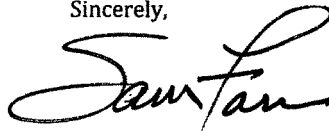
NOAA's ORF programs provide a wide range of critical services for my constituents as well as citizens across the country. In particular, I want to highlight the importance of the Marine Debris Program, the Regional Ocean Partnerships Program, Fisheries Habitat Restoration, the NOAA Education Program, the National Sea Grant College Program, Cooperative Research, National Estuarine Research Reserve System, the Integrated Ocean Observing Program, the National Marine Sanctuary Program, the Pacific Salmon Protected Species Research and Management Program, not to mention the National Weather Service, which provides the weather data on which virtually all Americans rely. Combined, the many NOAA activities support necessary ocean protection, research, exploration, and education, facilitating America's trade and commerce, leisure and recreation, and putting seafood on our tables. In 2011, \$12.4 billion was allocated to ocean and coastal programs across all federal Departments and Agencies. This represented approximately one third of one percent of the total federal budget. This relatively small investment reaps huge rewards. According to the Bureau of Labor Statistics, in 2010, the ocean economy contributed \$258 billion to the U.S. gross domestic product (GDP) and provided more than 2.77 million jobs. Therefore, it is important

that we maintain full funding for these programs at FY12 levels to ensure that we can make progress towards increasing NOAA's funding to \$6 billion in the very near term.

As a Member of California's coastal delegation, I am intimately connected to and a strong advocate for coastal and ocean resources. Several of the programs under NOAA's jurisdiction and other private and state entities are represented in my district, making it one of the most dynamic coastal destinations in the country. California's 20th District includes the Monterey Bay National Marine Sanctuary, the Nation's second largest marine sanctuary supporting one of the world's most diverse marine ecosystems, National Marine Protected Area Center and Science Institute, as well as the Monterey Bay Aquarium. The District is also home to several top ocean research laboratories and education institutions including the University of California at Santa Cruz, Moss Landing Marine Lab, California State University at Monterey Bay, and Stanford's Hopkins Marine Station. These institutions are at the forefront of innovative scientific research concerning highly migratory species like sharks and tuna, protected species like Pacific salmon, ocean observing, and data collection on fish stocks and ocean economics.

I cannot emphasize enough that the health and sustainability of our ocean and coastal resources is imperative for the future of our nation. NOAA plays a critical role in helping the federal government fulfill its public trust responsibility. Therefore, I would appreciate your support in using NOAA's FY12 funding levels as a baseline for the 2014 appropriations cycle. This is critically important to my district and to our nation. I do understand the requested investment is sizable; however, it must be done to protect our nation's largest public trust. We must show strong support for the stewardship of our ocean. Let's make the necessary strides in the 2014 cycle to give this agency the resources it needs to fully realize its mission, to effectively provide its many products and services to the American people, and to understand and manage the ocean upon which our nation is dependent.

Sincerely,

A handwritten signature in black ink, appearing to read "Sam Farr", with a stylized, flowing script.

SAM FARR
Member of Congress

Mr. WOLF. Sam, thank you for your testimony. We will do everything we can, and I want to thank you for your leadership. You do show up and I was at the aquarium as you know and out in Monterey and also I saw your dad's name, I think your dad was involved in that wasn't he? I saw your father's name on something when I was out in Monterey.

Mr. FARR. His name is all over things out there. He was the State Senator who really took on environmental issues back in the 50s and 60s when it wasn't very popular.

Mr. WOLF. Yeah. So any way, you have been very, very faithful and so we will do everything we can.

Mr. FARR. Well, thank you, I appreciate your leadership.

Mr. WOLF. Thanks.

Mr. FARR. And I appreciate your colleague's leadership in science.

Mr. WOLF. He has been very good.

Mr. FARR. He just likes things that are millions and millions of years old.

Mr. WOLF. And far away.

LaDon Swann, Sea Grant Association.

THURSDAY, MARCH 21, 2013.

SEA GRANT ASSOCIATION

WITNESS

LADON SWANN, PRESIDENT

Mr. SWANN. Good afternoon. Chairman and members of the subcommittee, my name is LaDon Swann. I am the director of the Mississippi-Alabama sea grant consortium. I am here in my capacity as president of the Sea Grant Association.

I begin my remarks by thanking the subcommittee for its long-standing support of the NOAA sea grant program.

Sea Grant works with university and state partners to help citizens understand, conserve, and better utilize America's coastal ocean and great lakes resources.

Because of strong congressional support Sea Grant is meeting its core mission in support of NOAA by delivering many benefits to our ocean and coastal communities.

In fiscal year 2012 alone Sea Grant helped deliver an estimated \$170 million in direct economic benefits to the Nation, approximately 630 new businesses, and more than 3800 jobs that were created or retained.

Continue to provide economic and scientific benefits to coastal residents.

The Sea Grant Association recommends that the sea grant program be funded for fiscal year 2014 at \$70 million. This is \$22 million below the authorized level for 2014.

Sea Grant is an extremely efficient program. Approximately 95 percent of the federal funding provided to Sea Grant goes to state programs where it is used to sponsor research, conduct extension and outreach programs, and deliver valuable services to states and universities that participate in the program.

In addition for every two federal dollars invested at least one additional dollar is provided in non-federal match support.

Sea Grant is a partnership of 32 programs and based at top universities in the national oceanic and atmospheric administration.

Sea Grant draws on the experience of more than 3,000 scientists, engineers, economists, public outreach experts, educators and students from more than 300 institutions.

Sea Grant is able to make an impact to the local and state level.

One of Sea Grant's great strengths is the integrity backed relationships formed in coastal communities and with local stakeholders. These have proved extremely beneficial during times of disaster, response, and recovery. Beginning with Hurricane Katrina and continuing with the deep water rise and oil spill and most recently with Hurricane Sandy.

The Sea Grant network has provided much needed boots on the ground and trusted assistance to affected communities.

Following each of these disasters it is often Sea Grant's training and programs that brought the first response to these affected communities.

Our Nation must use its coastal resources wisely to increase the resilience of our coastal communities and sustain the health and productivity of the ecosystems on which they depend.

With the federal funding which will leverage additional state and local support Sea Grant is uniquely positioned to continue to make significant contributions to improve the lives and livelihoods of the Nation's coastal communities.

Thank you for the opportunity to present these views. I would be happy to answer any questions or provide additional information to the subcommittee.

[The information follows:]

**Testimony for the Record
Dr. LaDon Swann
President, Sea Grant Association
Before the
Commerce-Justice-Science Appropriations Subcommittee
Committee on Appropriations
House of Representatives
Washington, D.C.
March 21, 2013**

Mr. Chairman and Members of the Subcommittee, my name is LaDon Swann and I am the Director of the Alabama-Mississippi Sea Grant Consortium. I am submitting this testimony in my capacity as President of the Sea Grant Association (SGA). The SGA appreciates very much the support the Congress has provided the National Sea Grant College Program over the years. Because of that support, Sea Grant has been able to deliver a number of quantifiable benefits to the residents of our ocean and coastal communities which are documented below. To continue to achieve a high rate of return on federal investment and to produce impressive and quantifiable benefits to coastal residents in the future, the SGA recommends that the National Sea Grant College Program within NOAA be funded in FY 2014 at \$70 million. Recognizing the constraints in the budget process, this amount is \$22 million below the authorized level for FY 2014 and responds to guidance provided in the FY 2012 conference report that said:

“the Committee recognizes the important role the Sea Grant program plays in connecting coastal and Great Lakes communities with practical research and results, and encourages the growth of this program in future budget requests.”

The National Sea Grant College Program funds the best competitive science at our nation’s colleges and universities to inform public and private decision-making in order to enhance the practical use and conservation of coastal, marine, and Great Lakes resources while also expanding economy and maintaining a sustainable environment. Sea Grant addresses national priorities at the local level, by identifying citizens’ needs in order to help guide state and national research agendas.

The Return on Investment to the Nation Through Sea Grant

To those who ask if this federal program is delivering value and results to the taxpayer – we believe the answer is a resounding “yes.” According to the National Sea Grant Advisory Board, the Nation received the following in return for its FY 2012 investment in Sea Grant:

- \$170M in direct economic benefits to the Nation, which represents nearly a 2.5 to 1 return on the federal investment;
- 630 new businesses were created or retained, and more than 3,800 jobs were created or retained due to Sea Grant efforts;
- 900 communities across the nation have adopted more sustainable economic or environmental development practices and policies;
- More than 9,900 Fishers adopted responsible harvesting techniques;

- More than 56,000 stakeholders modified practices based on increased knowledge of safety, sustainability, and health;
- More than 600 communities adopted or improved hazard resiliency practices with Sea Grant assistance to make them better prepared to respond and to and recovery from hazardous coastal events;
- More than 1,500 individuals or businesses received new certifications in HACCP (hazard analysis and critical control point) handling of seafood products, improving the safety of seafood consumption by Americans across the country;
- More than 670,000 acres of degraded ecosystems were restored as a result of Sea Grant activities; and
- Sea Grant expanded the Nation's workforce by supporting more than 1000 undergraduate and more than 950 graduate students, resulting in 350 graduate or undergraduate degrees awarded.

Approximately 95% of the federal funding provided to Sea Grant leaves Washington and goes primarily to state university-led programs where it is used to conduct research, carry out extension and outreach activities, and deliver valuable services to states that participate in this program. In addition, federal funding through the Sea Grant program has a significant leveraging impact with every two federal dollars invested attracting at least an additional dollar in non-federal resources in matching funding.

For more than 40 years, the National Sea Grant College Program has worked with its university partners to create and maintain a healthy coastal environment and a robust and productive coastal economy. The Sea Grant network includes more than 30 programs based at top universities in every coastal and Great Lakes state, Puerto Rico, and Guam. Sea Grant brings the robust intellectual capacity that we already have in our universities to bear on important societal problems and work force development. The programs within the Sea Grant network help citizens and businesses understand, conserve, and better utilize America's coastal, ocean and Great Lakes resources. Through a partnership between universities and the National Oceanic and Atmospheric Administration, Sea Grant directs federal resources to pressing problems in local communities. The partnership with universities is a great source of efficiency, and is why the National Sea Grant College Program is different from some of the other NOAA Coastal programs. By drawing on the experience of more than 3,000 scientists, engineers, public outreach experts, educators and students from more than 300 institutions, Sea Grant is able to make an impact at local and state levels, and serve as a powerful national force for change.

The Economic Importance of the Nation's Coastal Communities

It is important to recognize that 52% of the nation's total population lives in coastal watershed counties. The Nation's coastal population increased by nearly 51 million people from 1970 to 2010 and by 2020, the coastal population is expected to grow by another 10% or 15.6 million. According to NOAA, the coastal economy contributed \$8.3 trillion to the Nation's Gross Domestic Product resulting in 66 million jobs and wages worth an estimated \$3.4 trillion.

Recreational coastal fishing contributed about \$73 billion in total economic impact supporting over 320,000 jobs. For commercial fishing, the average annual value of all U.S. marine fisheries

from 2008 to 2010 is estimated at \$4 billion providing about 1 million jobs and generating over \$32 billion in income.

Our nation's ports, often located in the heart of sensitive coastal ecosystems, are an essential driver of the U.S. economy. About \$1.9 trillion worth of imports came through U.S. ports in 2010 supporting an estimated 13 million jobs.

Over 50% of the total energy produced domestically occurred in coastal states including natural gas production, electricity generation, and oil and gas production. Coastal areas are providing opportunities for renewable energy development with projects that seek to extract energy from the movement of ocean water due to tides, currents, or waves; from the temperature differential between hot and cold ocean water; and from strong winds in offshore ocean environments.

In 2010 over 13.5 million people in the U.S. were employed in the tourism industry in coastal states and communities (transportation, lodging, food services, entertainment, and retail) in over 750,000 business establishments, earning combined wages of \$266 billion. The total economic value generated by the U.S. coastal tourism industry in 2010 has been estimated at \$531 billion.

The Role of Sea Grant in Supporting The Nation's Coastal Communities – Increasing Coastal Resiliency

In addition to the annual positive scientific and economic impacts delivered by the National Sea Grant College Program, the relationships formed in coastal communities and with local stakeholders have proved extremely beneficial and supportive in disaster response. Beginning with hurricane Katrina and including the major disasters of the Deepwater Horizon oil spill and most recently hurricane Sandy, the Sea Grant network has provided substantial and much needed “boots-on-the-ground” assistance to affected communities. Following each of these disasters, it was often Sea Grant training and programs that brought the first response to these impacted communities.

Sea Grant works with Federal and State agencies to provide critical information following natural and man-made disasters. In the wake of these events, Sea Grant programs assist impacted communities and states by facilitating community planning and capacity building by working with Department of Commerce Disaster Response Teams, Federal Emergency Management Agency (FEMA) mitigation assessment teams, State resource agencies for fishery and aquaculture impacts, local governments, as well as others in addressing coastal impacts.

Immediately following every event, Sea Grant extension professionals and scientists were there, helping communities assess impacts to coastal businesses including local marinas, aquaculture businesses, and commercial fishing. Sea Grant also helped determine the extent of changes in coastal geology, barrier islands, beach erosion, and sand dune migration. Sea Grant capabilities allows the program to provide expertise and experience in assessing other environmental impacts such as marine debris and changes to water quality. Sea Grant adds to its ongoing efforts of providing coastal communities with technical assistance, helping to prepare community recovery plans, long-term resilience plans, and explaining future mitigation choices ranging from seawalls

to green infrastructure. Sea Grant has expanded its role to include the development of tools and programs for addressing the long-term health impacts of disasters on coastal residents.

Future Directions of the Sea Grant Program

Over the next five years, Sea Grant plans to concentrate its efforts in four areas: healthy coastal ecosystems; resilient communities and economies, sustainable fisheries and aquaculture and environmental literacy and workforce development. These four interrelated focus areas emerged from the NOAA and program's strategic planning processes as areas of critical importance to the health and vitality of the nation's coastal resources and communities. They respond to issues of major importance to NOAA, are consistent with the work of NOAA coastal program integration efforts, and are topical areas in which Sea Grant has made substantial contributions in the past and is positioned to make significant contributions in the future.

In each of the four focus areas, Sea Grant has identified goals to pursue and strategies designed to take advantage of its strengths in integrated research, outreach, and education, and its established presence in coastal communities. Understanding relationships and synergies across focus areas is vital to achieving the focus area goals. Sea Grant is one of many partners working to address these complex and interrelated issues. Understanding how activities in one area can support and complement other activities, and using partnerships to accomplish shared goals, are strategies inherent to Sea Grant, and will be central to achieving the goals outlined in the NOAA and National Sea Grant College program's strategic plans.

Concluding Thoughts

America must use its coastal resources wisely to increase the resilience of our coastal communities and sustain the health and productivity of the ecosystems on which they depend. With the requested Federal funding used to leverage significant state and local support, the National Sea Grant College Program will be uniquely positioned to continue to make significant contributions to improving the lives and livelihoods of the Nation's coastal communities.

Thank you for the opportunity to present these views. The SGA would be happy to answer questions or provide additional information to the Subcommittee.

Mr. WOLF. Thank you very much for your testimony.

Mr. SWANN. Yes, sir.

Mr. WOLF. Scott Peters, Congressman Peters. Your full statement will appear in the record.

THURSDAY, MARCH 21, 2013.

UNITED STATES CONGRESS

WITNESS

HON. SCOTT PETERS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. PETERS. Thank you very much, Mr. Chairman, I appreciate the opportunity to address you today.

Through the appropriations process you have the ability to ensure that our science agencies are fully supported to grow our economy, and I urge you to fully fund our Nation's science and technology initiatives.

These accounts have an extremely high rate of return and do more than anything to keep the United States innovative and prosperous.

I know firsthand from my experience in San Diego that basic research and development funds are critical to innovation and national security and jobs, and I implore the committee to give adequate attention to federal basic science research funding.

The San Diego economy is driven by tourism, the military, and science and technology.

In fiscal year 2012 San Diego firms received more than \$130 million from the National Science Foundation. It is these critical investments that have helped San Diego earn the title of the second largest life sciences cluster in the United States.

Thousands of American companies of all sizes are the product of federally funded research. Recently 100 companies were highlighted by The Science Coalition as getting their start from federal funding. Together they employ over 100,000 people with annual revenues approaching \$100 billion.

In the 1980 Qualcomm received federal funding to conduct research enabling the fledgling company to attract capital and design and manufacture semiconductors for mobile phones among other products. And today Qualcomm employs 12,000 San Diegans and invests about \$4 billion of its own money into research and development.

If we are to compete for global talent we must keep investing in scientific research.

As you may know in late 2008 China started its "One Thousand Talents Program" aimed to bring highly educated people, many of whom were educated abroad back to China. Academic and other research institutes have been encouraged to adopt similar programs which offer housing and research funding and other incentives to recruit talented students and researchers. That is what we have to compete with.

My friends at the Salk Institute of Biological Studies gave me an example. They told me that for a kid today who is interested in science, it takes at least about when he or she is 40 years old or

before they can get that lab where they can write those grants, that they can compete for funding. We used to fund about 25 percent of those grants and now fund about seven percent.

And a person looking at that a landscape has to really wonder if the United States is really committed to science, and if this is a place for them to do science when so many other countries are offering much more committed and adequate funding streams than we are.

So I strongly support funding for the National Science Foundation at the highest level.

NSF research fuels San Diego's economy by supporting breakthroughs in bio medicine, physics, chemistry, engineering, economics, and other social sciences, as well as information, technology, telecommunications, and nanotechnology.

Training in STEM, science, technology, engineering and math is critical to maintaining U.S. competitiveness and national security especially in industries like information technology, aeronautics, advanced energy systems, and biotechnology.

Here is an example of ongoing research. A UCSD scientist is leading an NSF-funded team to study early childhood development. The UC system produces an average of four inventions per day for 1,000 R&D companies. Investments in NSF are investments in innovation.

We all understand the budgetary landscape in which we must operate with regard to fiscal year 2014 and it is beyond challenging and requires difficult choices.

For my own part I am willing to work together for a budget that cuts wasteful spending, addresses our long-term debt, creates a competitive tax code, keeps our military strong, and invests in our infrastructure, education, and in science to insure our competitiveness in the 21st century.

Thank you, Mr. Chairman for the opportunity to testify.

[The information follows:]

Testimony for Fiscal Year 2014
Commerce, Justice, Science, and Related Agencies Appropriations Bill
Submitted to the Subcommittee on Commerce, Justice, Science, and Related Agencies
Committee on Appropriations
United States House of Representatives
Washington, DC
Submitted by
Representative Scott Peters
March 21, 2013

Chairman Wolf, Ranking Member Fattah, and Members of the Subcommittee:

As we work on the Fiscal Year 2014 budget, I urge you to fully support funding for our nation's science and technology initiatives. These accounts have an extremely high rate of return and do more than anything to keep the United States innovative and prosperous. It is science, technology, and our military that are main drivers of San Diego's economy. In FY 2012, San Diego firms received more than \$130 million from the National Science Foundation. It's these critical investments that have helped San Diego earn the title of the second-largest life sciences cluster in the United States.

Thousands of American companies, of all sizes, are the product of federally funded research. Recently, 100 companies were highlighted by The Science Coalition as getting their start from federal funding. Altogether, these companies employ well over 100,000 people and have annual revenues approaching \$100 billion. In the 1980s, Qualcomm received federal funding to conduct research, enabling the fledgling company to attract capital and design and manufacture semiconductors for mobile phones among other products. Today, Qualcomm employs approximately 12,000 San Diegans and invests about \$4 billion of its own money into research and development.

When we are seeing global competition for our talent, we must keep investing in scientific research and development so that the next Qualcomm or Google can start and grow in the U.S. We cannot afford to weaken our global competitiveness or hinder our ability to retain scientists whose research could lead to the next big science or tech firm.

I understand that the budgetary landscape in which we must operate with regard to FY14 and beyond is challenging and requires hard choices. That said, I wanted to reiterate my full support for the budget accounts listed below, which are critical to the nation's economic health and well-being. As you are well aware, California benefits disproportionately from the federal investment in research and development, and I am proud of the fact that San Diegan research institutions and tech firms are highly successful competitors for merit-based research funding, from all available sources.

I respectfully request that we can continue to invest in the following accounts:

National Science Foundation (NSF), Research and Related Activities, \$5,983,280,000

I strongly support funding the NSF at a level at least the President's FY13 request of \$5.98328 billion for NSF's Research and Related Activities. This is \$40.587 million above the FY13 House Appropriations recommendation. NSF sponsors the work of educators, researchers, and students who are solving important scientific and technical challenges, building future economic growth with technological breakthroughs, devising better ways to teach science and math, and pushing back the frontiers of fundamental science through curiosity-driven research. NSF-funded research fuels San Diego's economy by supporting breakthroughs in biomedicine, physics, chemistry, engineering, economics and other social sciences, information technology, telecommunications and nanotechnology. Training in STEM (Science, Technology, Engineering, Math) is critical to maintaining U.S. competitiveness, especially in industries such as information technology, aeronautics, advanced energy systems, and biotechnology

Department of Commerce (DOC), National Institute of Standards and Technology (NIST), Scientific and Technical Research and Services, \$648,000,000

NIST's Scientific and Technical Research and Services is instrumental in accelerating tech transfer, and I support the President's FY13 request of \$648 million. This amount is \$26.827 million above the House Appropriations FY13 recommendation.

DOC, NIST, Industrial Technology Services, \$149,000,000

Industrial Technology Services (ITS) includes the Manufacturing Extension Partnership, a federal-state-industry program that offers U.S. manufacturers access to technologies, resources and industry experts. In their work with NIST, UC campuses promote U.S. innovation and industrial competitiveness through measurement science, standards, and technology in ways that enhance economic security and improve our quality of life. Therefore, ITS should be at least levelly funded in FY14 at \$149 million.

DOC, NOAA, Ocean Resources Conservation and Assessment, Integrated Ocean Observing System, \$31,468,000

UCSD is the home to the Scripps Institution of Oceanography, a major participant in the Integrated Ocean Observing System (IOOS). I am very supportive of the FY13 House Appropriations recommendation of \$31.458 million, which is \$2.08 million above the FY12 amount. The Integrated Coastal and Ocean Observing System Act was enacted in 2009 to address the need for enhanced ocean observing and forecasting capabilities and timely distribution of information on our oceans, coasts, and Great Lakes. A stable network of regional systems provides a stakeholder-driven IOOS that addresses the specific needs of coastal and ocean users, including maritime commerce, fisheries, aquaculture, offshore energy, public health and resource managers, coastal communities, and the general public.

DOC, NOAA, Climate Competitive Research, Sustained Observations and Regional Information Program within NOAA Operations, Research, Facilities, \$146,330,000

California, and especially San Diego, relies on the climate, weather, and water forecasts developed under the Sustained Observations and Regional Information Program to produce seasonal and annual management plans for water, agriculture, energy, fisheries and other businesses. This research program took a 20 percent reduction in FY 2012 (enacted at \$120

million) that will significantly impair the effectiveness of scientific observations, monitoring and modeling that help states manage their infrastructure and natural resources, and to reduce environmental risk and future federal and state costs from weather events, fire, floods and other natural disasters. The FY13 House Appropriations Committee recommended maintaining FY12 funding, and I support the President's FY13 request of \$146.33 million.

DOC, National Oceanic and Atmospheric Administration (NOAA), National Estuarine Research Reserve System, \$24,000,000

The National Estuarine Research Reserve System (NERRS) comprises of 28 protected estuaries including the Tijuana River National Estuarine Research Reserve in San Diego. Tijuana River NERR land protection work ensures that 2,447 acres of coastal property worth more than \$281.405 million is protected. NERRS supports effective coastal resource management, and effective and healthy management of estuaries minimizes disaster costs. In the wake of extreme weather events such as Hurricane Sandy, we should further invest in natural forms of infrastructure to make our nation more resilient. At \$24 million, my FY14 request is a modest investment in our nation's most productive habitats and populated communities. This is also NERRS' FY14 request, and the request is \$4 million more than the FY13 House Appropriations recommendation.

DOC, NOAA, Marine Sanctuary Program, \$41,932,000

The Channel Islands National Marine Sanctuary Program is a center of economic activity and is an integral part of local coastal communities. It is located less than 150 miles from more than 17 million people in southern California. Commercial fishing and recreation-tourism alone generated an estimated \$207 million in seven counties during 2002, supporting 3,300 jobs. I support maintaining at least level funding and am supportive of the FY13 House Appropriations recommendation of \$41.932 million.

National Aeronautics and Space Administration (NASA), NASA Space Grant, \$45,500,000

The Space Grant Program, which funds a national network of universities and colleges, is instrumental to attracting STEM students to pursue studies related to space exploration. The California Space Grant Consortium is headquartered at the University of California, San Diego (UCSD), and involves participation from nine of the ten University of California (UC) campuses, ten California State University campuses, several other universities in the state, plus three NASA centers – 28 affiliates in all. Space Grant institutions support NASA's aeronautics and space missions by giving students practical hands-on training in aerospace and related fields. The University of California provides matching funds for Space Grant award recipients, who are key to the program's K-12 and community college outreach throughout the state. In FY11, the Space Grant Program was funded at \$45.5 million, while in FY13 it was funded at \$24 million, a deep cut for this program.

NASA, Science Mission Directorate, \$5,095,000,000

I support at least the FY13 House Appropriations recommended funding (\$5.095 billion) for NASA's Science Mission Directorate, which promotes discoveries that expand our knowledge of the Earth, our solar system, and the universe.

Mr. Chairman, thank you for the opportunity to testify. Our investments in science and technology support more than just jobs; they maintain our scientific edge, and we will reap the many benefits in the years to come. I will be pleased to answer any questions you or the Members may have.

Mr. WOLF. Thank you.

This committee has funded the National Science Foundation at the highest level it has ever been funded. Zero, period, no question.

Mr. PETERS. Right.

Mr. WOLF. From both sides of the aisle.

Until we deal with the entitlements, until you are prepared to raise the retirement age for social security, until you are prepared to pass something like Simpson-Bowles these programs will continue to get squeezed and squeezed. We have had to cut other programs—

Mr. PETERS. Uh-huh.

Mr. WOLF [continuing]. Other programs. We have prisons now whereby prison guards are being killed.

But until we deal with the entitlements, until we can come together in a grand package you are going to see significant cuts are coming.

Mr. PETERS. Mr. Chairman—

Mr. WOLF. There is no other way about it.

Mr. PETERS [continuing]. I understand, I would just offer that I am a supporter of the Simpson-Bowles approach.

Mr. WOLF. I know you were, I saw your name down there.

Mr. PETERS. Okay.

Mr. WOLF. And I think the Simpson-Bowles is the only thing—I said anybody. It is easy to criticize and talk about what the problem is, but you have got to tell us what your solution is, and the only solution that I have seen, there may be a better one, maybe somebody has a better idea, but the outline, Simpson-Bowles is not the ten commandments.

Mr. PETERS. Right.

Mr. WOLF. I mean, you know, you can—but if we don't do something big and grand and bold like that, and it troubles me, I have 16 grandkids, I worry about their future.

And we are going to be—but this committee so your mind is put at ease, we have funded—Mr. Fattah has been there too, it has been bipartisan, NSF has been at the highest, highest level.

But any way thank you for your testimony.

Mr. PETERS. I look forward to working with you. Thank you.

Mr. WOLF. Thanks. Thank you very much.

Dr. Russ Lea, National Ecological Observatory Network. Yes, sir.

THURSDAY, MARCH 21, 2013.

NATIONAL ECOLOGICAL OBSERVATORY NETWORK

WITNESS

DR. RUSS LEA, CHIEF EXECUTIVE OFFICER

Dr. LEA. Thank you, Chairman Wolf.

Chairman Wolf, Ranking Member Fattah, and members of the subcommittee thank you for the opportunity to testify.

My name is Dr. Russell Lea and I am the CEO of NEON, Inc. I appreciate the opportunity to appear before this subcommittee and to ask your support for the NEON project.

The project is funded under the National Science Foundation's MREFC account with an estimated fiscal year 2014 request of \$98 million.

On behalf of the scientific community who will be using NEON thank you for the strong support that Congress has provided to the National Science Foundation, the NEON project, and the core funding for the National Science Foundation's biological sciences directorate.

NEON is a world-class distributed environmental observatory at the frontiers of science and engineering. Its sites are located throughout the U.S., and in the region locations include the Blandy Experimental Farm in Virginia's congressional district 10, the nearby Smithsonian Conservation Biology Institute, and the Smithsonian Environmental Research Center in Maryland.

NSF has clearly stated its no cost overruns policy for scientific facilities. For each year of NEON's construction we are required to produce a detailed budget and a schedule profile that is reviewed by NSF and its panels.

The observatory is approaching the middle of its approved construction profile, estimated out-year costs are expected to start with \$98 million in fiscal year 2014. This amount could change once the Administration releases its budget request, but changes to that profile will impact the contracts and agreements to industry for work that is currently in progress. Such delays will ultimately increase the cost of a project, and if funding falls below what is needed to build out the observatory it will jeopardize a construction at a number of locations.

This is potentially damaging because the constellation of the NEON sites together function as a single integrated instrument.

NEON is a shared vision by the scientific community to build this one of a kind observatory to listen to the pulse of the U.S. continental ecosystem.

Congressional support has gotten us to the point where a number of observatories are currently in place with more being constructed every single day.

We have an obligation to execute this project and deliver a fully functional, fully scoped observatory to insure this Nation is equipped with the highest quality data to cope with an ever changing environment.

Thank you for the opportunity to appear before you today.

[The information follows:]

Testimony of Dr. Russell Lea
Chief Executive Officer, National Ecological Observatory Network (NEON), Inc.
before the
UNITED STATES HOUSE OF REPRESENTATIVES
Committee on Appropriations
Subcommittee on Commerce, Justice, Science, and Related Agencies
on
The National Science Foundation (NSF)
And the National Ecological Observatory Network (NEON)
March 21, 2013

Chairman Wolf, Ranking Member Fattah, and Members of the Subcommittee, thank you for the opportunity to testify. My name is Dr. Russell Lea and I am the Chief Executive Officer of NEON, Inc. I appreciate the opportunity to appear before the Subcommittee to ask for your support for the NEON project that is expected to be included in NSF's FY14 Budget Request to Congress. NEON is one of the ongoing projects in NSF's Major Research Equipment and Facilities Construction (MREFC) account. The estimated FY2014 budget request, based on NEON's out-year expenditure profile in NSF's FY2013 Budget Request to Congress, is \$98.2M.

On behalf of the scientific community who will be using NEON, I would like to express our appreciation for the strong support that Congress has consistently provided NSF, and in particular the NEON project and core funding for NSF's Biological Sciences Directorate. Sustained investments in science and technology are critical for a knowledge-intensive economy and for maintaining US scientific leadership. To this end, the MREFC account was designed to fund unique, transformational research infrastructure at the frontiers of science and engineering.

NEON is a world-class distributed environmental Observatory that is a prime example of such infrastructure. NEON sites are located throughout the United States. Sites in the vicinity of Washington DC include the Blandy Experimental Farm located in Virginia's Congressional District 10, the nearby Smithsonian Conservation Biology Institute, and the Smithsonian Environmental Research Center in Maryland.

Planning and Building the Observatory. NEON has undergone a series of rigorous reviews mandated by NSF's Major Facilities Office. NSF has clearly promulgated its "no-cost overruns" policy with regards to the construction of facilities like NEON. This is instituted through a rigorous planning process that details, for each year of the anticipated project duration, the project's budget and schedule. These schedules and budgets with estimated out-year costs are thoroughly reviewed through a series of NSF managed panels. Authorization to commence construction by the National Science Board, the NSF Director, OMB, and Congress is contingent on the successful outcome of these reviews.

NEON is currently approaching the middle of its approved construction profile that commenced in FY2011. The estimated FY2014 budget request, based on the expenditure profile in NSF's FY2013 Budget Request to Congress, is \$98.2M. Anticipated expenditures are \$91M and \$80.66M in subsequent out-years. The aforementioned amounts could change once the Administration releases its FY2014 Budget Request

Impacts of Profile Perturbations. Perturbations to that profile will impact contracts and agreements to industry for work in progress. This will impact a variety of activities, ranging from the hiring of local skilled labor for the installation of civil infrastructure like electrical power and concrete foundations for NEON's bio-meteorological towers, to the procurement of automated sensors from high-tech industries. Delays in these activities, coupled with the cost of maintaining skilled Observatory staff, will ultimately increase the cost of this project. The construction process is subject to NSF's "no cost-overruns" policy. If funding falls below what is needed to build this observatory, it will result in a facility that will fall short of its scientific promise.

Guided by environmental grand challenges proposed by the National Research Council (NRC), NEON scientists and engineers partnered with the scientific community to define the capabilities required of the Observatory to enable transformational science. These capabilities were reviewed and approved by NSF panels, and consequently a construction profile crafted to deliver those capabilities. NEON must be built to those specifications if the scientific community is to successfully address the NRC grand challenges. Only then can we begin to understand the impacts of large-scale environmental changes on our ability to sustainably meet society's food, fiber, energy, and water needs. Only then will the United States have the unique distinction of possessing the only large-scale scientific infrastructure capable of listening to the pulse of an entire continent's ecosystem.

Conclusion. NEON is not only an essential investment for continued US scientific leadership, but it also helps fuel the Nation's long-term competitiveness and innovation agenda. I recognize the severe budget constraints facing Congress. Funding such projects as closely as technically feasible to the levels proposed in their funding profiles will ensure the efficient use of taxpayer dollars, while delivering essential capabilities to the scientific community to enable transformational science.

Thank you for the opportunity to appear before you today. I would be happy to answer any questions you might have.

Mr. WOLF. Okay. Thank you very much for your testimony. I appreciate it.

Judith Bond, Federation of American Societies for Experimental Biology.

THURSDAY, MARCH 21, 2013.

**FEDERATION OF AMERICAN SOCIETIES FOR
EXPERIMENTAL BIOLOGY**

WITNESS

JUDITH S. BOND, PH.D., PRESIDENT

Ms. BOND. Thank you very much.

We understand the constraints you are under, but we have to—we feel passionately, I think all these people in here about what we need and future generations.

Mr. WOLF. And I am glad you feel passionately, but——

Ms. BOND. So we have to——

Mr. WOLF [continuing]. You have to feel passionate about reforming the entitlements too, because——

Ms. BOND. Absolutely. I understand.

Mr. WOLF [continuing]. I am not going to ask you how old you are, but even here——

Ms. BOND. Old enough.

Mr. WOLF [continuing]. Maybe add 12 years to your age. At that time every penny goes for Medicare, Medicare, social security, and interest on the debt, and the interest payments will be about \$10 billion a week of—that is interest. And imagine what we could do with all the programs and we could just do amazing things.

But I am glad you a passionate, but we are going have to deal with that.

Ms. BOND. To get it done.

So let me just tell you a little bit about my background. I am a professor and former chair of biochemistry and molecular biology at Penn State University in Hershey.

Mr. WOLF. I have heard of that place.

Ms. BOND. You have heard of that place?

Before that I was at Virginia Commonwealth University in Virginia Tech. But I come here today in my capacity as president of FASEB, the Federation.

This is an umbrella organization of 26 life science societies, and we represent more than 100,000 researchers, all of who feel passionately about research and education.

And we request—our request our ask is for a budget of \$7.4 billion for NSF. That is an increase, a small increase, but it will fund like 324 new investigators, a lot of students and future investigators and problem solvers, and that is why we ask for this. It is a goal.

NSF is the only federal research agency dedicated to advancing fundamental research and education across all fields of science and engineering, and it is a primary funder for fields like mathematics, computer science, chemistry, basic biology with application to well being in the social sciences.

In addition it undertakes efforts to strengthen science technology and engineering, mathematics, education. So it is the future of our science.

These grants are awarded with very high peer review systems for all states, merit review, and the proposals are evaluated both on scientific basis and societal value.

So even though we have these unprecedented fiscal challenges we need to keep our Nation globally competitive and enable economic growth that is borne out of these discoveries and innovation. We can't cut everything and keep on going down. We have to invest in something.

NSF insures the development of a world-class engineering workforce of future generations, and it is for universities, it is for tech companies, it is for all kinds of economic growth engines.

It is a crucial source of scientific breakthroughs and this also fuels other mission organizations. And the failure to build is that we will slow the pace of discovery, discourage the next generation, and sacrifice our position as a global leader. We have heard that from a number of people and I think Representative Peters said it very well.

Therefore that is why we are going to recommend this \$7.4 billion and do anything we can do help you get there. We are a resource for data, we have, you know, these 100,000 scientists who would be glad to come and talk to your colleagues and to help in any way we can.

But it is the intellectual capital, it is the innovation, and it is the future of science in our country that we are fighting for.

[The information follows:]

Outside Witness Testimony
Judith S. Bond, Ph.D., President
Federation of American Societies for Experimental Biology
 Before the
Subcommittee on Commerce Justice Science and Related Agencies
United States House of Representatives
March 21, 2013

Chairman Wolf, Ranking Member Fattah, and distinguished members of the Subcommittee, thank you for the opportunity to testify on behalf of the National Science Foundation (NSF). I am a Professor Emerita and former Chair of Biochemistry and Molecular Biology at Penn State College of Medicine in Hershey PA. I come before you today in my capacity as the President the Federation of American Societies for Experimental Biology (FASEB), an umbrella organization representing 26 scientific and engineering professional societies and more than 100,000 researchers, to request a fiscal year 2014 budget of \$7.4 billion for NSF.

NSF is the only federal research agency dedicated to advancing fundamental research and education across all fields of science and engineering. NSF serves as the primary federal funding source for research in fields such as mathematics, computer science, basic biology with direct application to human health, and the social sciences. In addition to fostering scientific research, the agency undertakes innovative efforts to strengthen science, technology, engineering, and mathematics education nationwide. These grants, awarded to projects of the highest quality and greatest significance in all 50 states, are selected using a rigorous merit-review process that evaluates proposals on both scientific and societal value.

Recent examples of outstanding NSF funded research include using light to better understand the brain. The overwhelming complexity of the brain limits our ability to understand and treat neurological and psychiatric illnesses. The emerging technique of optogenetics represents a promising approach to overcoming this limitation by deconstructing the brain's complexity. Using light-responsive proteins, genetically introduced into the cells of living organisms, optogenetics allows the behavior of highly specific and functionally similar populations of cells to be controlled. Researchers are using optogenetics to make phenomenal progress in the expansion of our knowledge of the brain, which lays the foundation for the next generation of new breakthrough therapies for Parkinson's disease and other devastating disorders.

NSF is also supporting the exciting work aimed at building biological machines. Using only hydrogel, heart cells, and a 3-D printer, researchers have created cell-powered, non-electric walking machines. The locomotion of the "bio-bot" is driven by the beating of heart cells. By integrating different types of cells that are sensitive to specific environmental stimuli, such as drugs or toxins, bio-bots could be used as sensors. Eventually, bio-bots may be used as neutralizers of toxic chemicals and could be customized for applications in medicine, energy, defense, and the environment.

In addition, NSF supports studies aimed at using biodiversity to develop biofuel alternatives. The search for alternate energy sources is growing in economic importance as the fossil fuel supply rapidly depletes and concerns about its environmental effects grow. NSF-supported research at the Cedar Creek Ecosystem Science Reserve is exploring the use of prairie biomass as an

alternative biofuel to corn and soybean monocultures. Prairie plots with higher species diversity yield a greater energy gain than monocultures, and sequester larger amounts of carbon dioxide in soil and in underground root systems. The discoveries at Cedar Creek suggest that high-diversity prairie biomass may be a viable biofuel alternative for our nation's energy needs that minimizes production of greenhouse gases, while simultaneously providing wildlife benefits and ecosystem values.

Another example of the groundbreaking science being funded by NSF is in the area of hearing loss research. Recently, a team of scientists has determined the 3-D atomic structure of an important component of inner ear hair cells essential for both hearing and balance. Inner ear hair cells have bundles of cilia on their exposed surface that convert sound and head position information into neural signals. The maintenance of physical linkages among cilia in the bundles is critical to proper functioning of the inner ear. Genetic mutations in the proteins responsible for this linkage often result in congenital deafness and balance disorders. Armed with the atomic structure and biological mechanism, results of this research will position researchers to develop more powerful therapeutic interventions for hearing impairment and balance deficits.

Finally, NSF plays the crucial role of nurturing the next generation of scientists. An NSF program to prepare future scientists and engineers, the Graduate Research Fellowship Program (GRFP) annually awards approximately 2,000 three-year fellowships to outstanding graduate students pursuing advanced degrees in science, technology, engineering, or mathematics. NSF graduate research fellows have become leaders in the scientific community, including Brian K. Kobilka, the 2012 Nobel Prize winner in Chemistry and Serge Haroch and David J. Wineland, who received the 2012 Nobel Prize in Physics.

At a time when the United States faces unprecedented fiscal challenges, scientific and technological advances are needed to keep our nation globally competitive and enable the economic growth that is born out of discovery and innovation. NSF's broad portfolio of fundamental research expands the frontiers of knowledge, and fuels future innovation. Furthermore, through its education and training initiatives, NSF ensures the development of a world-class scientific and engineering workforce, including at research institutions and high-tech companies.

NSF-funded research is a critical source of scientific breakthroughs, many of which provide the basic knowledge that fuels innovation in other, more mission-oriented agencies. Failure to build on prior NSF investments and continue support for the agency as science expands, would slow the pace of discovery, discourage the next generation of scientists and engineers, and sacrifice our position as the global leader in innovation. Therefore, FASEB recommends a minimum funding level of \$7.4 billion for the National Science Foundation in FY 2014 to prevent contraction. Our broader goal is a sustainable research program, a return to the demonstrated capacity level, and a funding trajectory reflective of the America COMPETES Act reauthorization. Our recommended increase of \$304 million would fund an additional 324 projects.

Again, thank you for the opportunity to offer FASEB's support for NSF. I close happy to work with the Subcommittee to strengthen NSF and to further its mission to foster innovation.

Mr. WOLF. Well, I agree, and again, we have funded NSF at the highest level ever.

And you can ask those 100,000 scientists to write their members of Congress to ask them to support something like the Simpson-Bowles Commission. Because once we do something like that it will take the pressure off the domestic discretionary, it will just allow us to do precisely what you are saying.

Do you still live in Happy Valley or—

Ms. BOND. No, I moved down south, North Carolina, the Research Triangle area. But I still go up—go back up quite a bit.

Mr. WOLF. Good. Thank you.

Ms. BOND. And you will have somebody else from Penn State here.

Mr. WOLF. Thank you for your testimony this morning.

Ms. BOND. Thank you.

Mr. WOLF. Elizabeth Rogan, Optical Society.

THURSDAY, MARCH 21, 2013.

OPTICAL SOCIETY

WITNESS

ELIZABETH ROGAN, CHIEF EXECUTIVE OFFICER

Ms. ROGAN. Good afternoon, Chairman Wolf and staff and it is an honor to be here with colleagues, and it was great to see Matthew Perry here this morning, and we realize, we took a small poll and thought maybe we should have the actors from the Big Bang Theory come next time. They have done more for science education than any other PR campaign that I know of.

My name is Elizabeth Rogan I am the CEO of the Optical Society and I appreciate the opportunity to comment on the fiscal budget for NSF and NIST.

And I have heard you loud and clear listening to your comments on the support that you have given the NSF and NIST and the challenges, and I am hoping I begin to make the case of what optics and photonics can do to help with the budget problems.

So optics and photonics is a highly specialized area of physics and engineering known as the science of light, and it makes possible high speed internet, life saving imagining health devices, LED, solar energy, and I think you know that because you know so much about the science business. And this is a science that NSF and NIST have helped underwrite and fund and it does solve problems. It does innovate competition, it does help the economy.

This last past summer, Mr. Chairman, the National Academy of Sciences worked on a report called "Optics and Photonics: Essential Technologies for our Nation," and this group came together and came back with five challenges this country faces to maintain its competitiveness.

One of them for instance was broadband telecom. I just came in this morning from the largest scientifically run telecom conference in the world and they are working on amazing things like cybersecurity, silicon photonics, datacom efforts.

These are—we have got companies that are engaged in working on these areas and growing because of the funding that NSF did ten years or five years ago in these areas. It is just incredible to see the innovation that is happening.

These two agencies as you know are just critical for a lot of activities, but the economies that you are talking about there is a real case to be made here, so NIST is the leading agency for this, NNMI, the National Network for Manufacturing Initiatives, and this is an organization that is going to create a manufacturing and research infrastructure here in this country that helps support industry, that comes up with a way that we can keep industry here, we can keep sales here, we can keep jobs here.

Last year there was a pilot program called Additive Manufacturing, it is 3D printing, you have heard about this, and it is amazing, it is amazing technology that builds products from scratch, micro level products, and it creates things, it saves waste, it saves on all kinds of abilities for budgets in this case, and it creates, you know, engine parts for jets, all kinds of things, but it is very, very creative.

Researchers at MIT developed something called the 3D Light Switch and it is a technique that was funded by NSF that manipulates neurons for light. And again, this is another life saving device. But it is not only for protecting lives and making our lifestyles better, it really does help the economy. It builds jobs, it creates a tax incentive that these companies and individuals will be able to pay taxes with the investments that have been done by NSF.

And this committee has been terrific in pioneering and championing continuous funding for these areas which I know you know that we need. And as a member of the science community we so appreciate your support and we are here to do whatever we can to help.

We hear you loud and clear. And we really appreciate the opportunity to be a witness today.

Thank you.

[The information follows:]

Testimony of Elizabeth Rogan

CEO

The Optical Society

Commerce, Justice, Science, and Related Agencies Subcommittee

House Appropriations Committee

March 21, 2013

Good morning, Chairman Wolf and Ranking Member Fattah. My name is Elizabeth Rogan, CEO of the Optical Society (OSA). I appreciate the opportunity to comment on the Fiscal Year 2014 budgets for the National Science Foundation (NSF) and National Institute of Standards and Technology (NIST), both of which are vital to the future economic growth of our nation. I would like to thank you and the subcommittee members for your stewardship in providing sustained investments in these two critical agencies especially during these tough economic times.

Mr. Chairman, OSA supports the Fiscal Year 2012 budget levels for NSF and NIST. During that year, NSF received a total of \$7 billion while NIST received \$750 million.

Uniting more than 180,000 professionals from 175 countries, the Optical Society, known as OSA, brings together the global optics community through our programs and initiatives. Since 1916 OSA has worked to advance the common interests of the field of optics and photonics, providing educational resources to the scientists, engineers and business leaders who work in the field by promoting the science of light and the advanced technologies made possible by optics and photonics. OSA publications, events, technical groups and programs foster optics knowledge and scientific collaboration among all those with an interest in this dynamic field.

Optics and photonics are highly specialized fields of physics and engineering known as the “science of light,” which makes possible everything from life-saving medical imaging devices and solar energy to high-speed Internet connections, computer chips and LEDs, to laser cutting for manufacturing. In short, optics and photonics are essential to solving problems, enabling innovation, facilitating economic growth and improving lives.

Mr. Chairman, this past summer the National Academy of Sciences released a landmark report discussing the current state of optical sciences and goals for the future – *Optics & Photonics: Essential Technologies for Our Nation*. The NAS study identifies the technological and economic opportunities the science has enabled, assesses trends in market needs, gives examples of where progress in photonics innovation has translated into economic benefits, and makes

recommendations for future research and policies that are intended to advance the optics and photonics discipline. The report states that “the promise of optics and photonics can be realized if the US acts now to cultivate this versatile scientific field.”

One of the key recommendations of the report is to engage US industry, government and academia in the design and oversight of R&D and related programs that include federal as well as industry funding.

OSA and other professional scientific societies are working to move the recommendations of the report forward, including its ultimate goal of the establishment of a National Photonics Initiative or NPI. We are collaborating with a number of industry partners and have reached out to the relevant federal agencies to pinpoint any barriers to competitiveness and identify ways the private sector, academia, and government can work together to overcome them. We look forward to working with the committee in the future as the NPI takes shape.

NIST and NSF are two agencies critical to strengthening the optics and photonics industry. Both make significant investments in the field and we’re already seeing the benefits of these programs:

1. NIST is the lead agency for the National Network for Manufacturing Innovation (NNMI), which seeks to create an effective manufacturing research infrastructure for U.S. industry and academia to solve industry-relevant problems. Last year, a special “pilot institute” was created on additive manufacturing, which brought together 85 companies, 13 research universities, nine community colleges and 18 non-profit and professional associations. Additive manufacturing, or “3-D printing,” is a technique that, rather than removing a material to create a basic commodity, builds products from scratch one microscopic layer at a time. This results in less waste of materials while promising a new era of customized, fast-turnaround manufacturing design, ideal for a sophisticated, nationally-based workforce. These advanced printers, enabled by optics, can create objects ranging from prosthetic limbs and functional human tissue to jet engine parts.

The Administration has announced that an additional three manufacturing institutes will be funded this year. It is our hope that they will consider the importance of optics and photonics as they move forward with these institutes.

2. NIST researchers are also working on improving the safety of the nation’s drinking water. The EPA has recently introduced stricter water treatment rules for controlling microbes that are resistant to the current chlorine-based disinfection practices. EPA has called for treating water with ultraviolet light to inactivate microbes that survive chlorine disinfection. The NIST Optical Radiation Group is working on research that aims to create guidelines for standards such as how powerful ultraviolet light needs to be to eliminate these microbes.

3. NIST researchers are working toward making fiber optic communications more efficient, resulting in the transmission of more data with a much lower error rate. This past year, NIST researchers in collaboration with Stanford University developed and tested a device that offers the promise of doubling data transmission rates and enabling commercial systems that can better safeguard the transfer of sensitive information. NIST researchers have also made progress toward an optimal single-photon detector system, which is an extremely important research goal, not only in fiber-based telecommunications, but in numerous other fields from quantum information science and data-encryption to medical imaging, light detection, DNA sequencing, astrophysics, and materials science.
4. An NSF-funded researcher at the University of Nebraska-Lincoln is working on a polymer solar cell to increase energy conversion efficiency. The goal is to ensure that almost any surface, including walls, windows, even computer bags and clothing, will have the ability to tap into power of the sun. If successful, this could lead to replacing large, expensive solar panels atop buildings and poles and bring the promise of solar technology to millions of Americans in a more practical and affordable way. The grant includes an educational component; the researcher is preparing a workshop about solar engineering and the possibility of engineering as a career for Nebraska's high school students.
5. Researchers at MIT have developed a 3-D "light switch" using an optogenetics technique that manipulates neurons with light. Optogenetics uses light-detecting proteins to sensitize select brain cells to a particular color of light. By illuminating precise areas of the brain, scientists can selectively activate or deactivate the individual neurons that have been sensitized. The 3-D tool developed at MIT with NSF funding enables unprecedented precision to activate a single kind of neuron at a precise location with a single beam of light. This type of precision tool could one day help treat Parkinson's disease and epilepsy and enable mapping of the circuitry of the brain. Biomedical optics research like this has the potential to change the lives of many Americans and the federal government is poised to advance these technologies through programs such as the recently established Fattah Neuroscience Initiative. I'd like to acknowledge and thank Ranking Member Fattah for his leadership with this initiative, which promotes research and discovery across brain cognition, development, disease and injury.

These programs are just a few examples of how federal investments in science – and optics and photonics in particular – are resulting in real-life improvements for ordinary citizens. Science and engineering research, whether conducted in the private sector, at a university or within a federal agency or laboratory, requires long-term predictability and a sustained, coordinated effort to produce positive results. I urge the committee to keep this in mind during the FY 2014 budget process and beyond.

No matter how strong our research programs may be, we must also ensure we continue to educate and train the next generation of innovators and manufacturers. As I travel throughout the US and meet with our corporate members, I continually hear the importance of a well-trained workforce in Science, Technology, Engineering and Math (STEM) fields. Many of our members can't fill the technical positions that their businesses have available, such as highly-skilled shop floor technicians who support manufacturers. NSF understands the importance of getting students interested in STEM fields and the urgency of equipping our young people with the skills needed for the jobs of today and tomorrow. NSF grants are funding projects like those of Dr. Carl Wieman, a Nobel Laureate and OSA member, for the "PhET Interactive Simulations" at the University of Colorado Boulder. The project provides free, interactive, research-based simulations of physics concepts for elementary through university students as well as tools for science educators from all across the country. Already, more than 90 million such simulations have been run, enhancing classroom curriculum and providing students with a powerful tool for experimentation and fun, interactive learning.

Mr. Chairman, these are certainly difficult economic times. We know that you and members of this subcommittee have long supported and understood the importance of long-term investments in R&D funding, and hope you will continue to make investments in science and technology a national priority.

Once again, we greatly appreciate this committee's leadership and look forward to working with you as you move forward with the Fiscal Year 2014 budget process.

Mr. WOLF. Well, thank you. We will continue, and I wish every member here hears what we are saying because I think it would put in perspective to say we have got to resolve this thing quickly.

Ms. ROGAN. Uh-huh.

Mr. WOLF. If we keep cutting the sciences and cutting the different things the Nation—frankly we had Niall Ferguson here who said great nations begin to decline very rapidly.

Ms. ROGAN. That is right.

Mr. WOLF. Thank you very much.

Ms. ROGAN. Thank you very much.

Mr. WOLF. Dr. Thomas Bogdon, University Center for Atmospheric Research.

THURSDAY, MARCH 21, 2013.

UNIVERSITY CENTER FOR ATMOSPHERIC RESEARCH

WITNESS

DR. THOMAS J. BOGDON, PRESIDENT

Dr. BOGDON. Good afternoon, Chairman Wolf, Mr. Culberson, it is a pleasure to be here.

I am Thomas Bogdon, I am the president of the University Corporation for Atmospheric Research and I represent nearly 100 academic research institutions across this country that collectively manage the national center for atmospheric research for the national science foundation.

I want to begin by thanking the subcommittee for its long-standing support of research and education at NSF, NASA, and NOAA.

As Superstorm Sandy takes its place in history over the last few months we should consider what the impact of Sandy might have been on the mid Atlantic states if that storm had hit some 50 years earlier say in October of 1963.

It might well have disrupted the 1963 World Series between the Yankees and the Dodgers, or it might have played havoc with the Giants/Cowboys football game at Yankee Stadium, or it might just have killed tens of thousands of people.

Fifty years after hurricane forecasts extended two days into the future, computer models and weather satellites were in their infancy, and forecasters have not foreseen the unprecedented left hook that Sandy took into New Jersey. That is because we lack the sophisticated weather information and systems that made it possible to make the right call on Sandy.

That enabled our citizens to prepare and take actions, actions that made a difference between life and death for millions of people along the east coast.

What did we do, what did you do to position us to be in the position to make such a forecast?

You chose to invest in the science and technology and education from the basic research and mathematics and computer science to the development of satellites and instrumentation that made vital observations.

We then ran those observing data through advanced computers which turned that intelligence into life saving information.

These advances are important, because as you know, today we are more vulnerable to the severe storms than we were in 1963. We have seen the deadliest hurricane and tornado outbreaks since the beginning of the 20th century, we have many people living in coastal areas, we are dependent on a communication system that is easily disrupted by storms and extreme events, and we are also very much dependent on the power grid for everything from transportation to commerce to sophisticated medical care, all of which are vulnerable to the extreme weather events.

But it was not the investment in computing satellite technology that delivered this life saving information, it was our investment in the environmental sciences including weather, climate, and ocean research, as well as the social sciences that help people to respond to those warnings in ways that made sense and saved lives and livelihood. And it was the innovation that enabled us to distill all that information so that it could be presented to our people, to your constituents with or without smartphones in a way that they could understand it.

As you have said yourself our Nation is having a debate regarding its fiscal future that will impact every citizen here today as well as future generations.

As part of that debate you have said yourself we are preparing to cut spending in nearly every part of the budget including research and development.

At a time when science is growing more capable of providing better and timelier forecasts is reducing our best research really the best way to prepare for a storm that could impact the U.S.?

We should use Sandy as a teachable moment and ask are we investing sufficiently in our research enterprise to enable us to accurately forecast the storms of tomorrow and are we really ready to walk away from the investments in our research enterprise that we made over the last 50 years? Investments which have served us as the foundation of our Nation's future, economic, and national security.

I hope you will continue to invest in the research enterprise so that some 50 years from now our children, their children, your children and grandchildren will find themselves in more economic opportunity, environmental stability, improved health care, and a better future.

Thanks for your attention.

[The information follows:]

**Testimony Regarding Fiscal Year 2014 Funding for
Federal Science and Technology Programs
Submitted to the
Subcommittee on Commerce, Justice, Science and Related Agencies
Committee on Appropriations,
United States House of Representatives
by
Thomas J. Bogdan, President,
University Corporation for Atmospheric Research**

On behalf of the University Corporation for Atmospheric Research (UCAR), I submit this testimony to the House Appropriations Subcommittee on Commerce, Justice, Science and Related Agencies. UCAR is a consortium of over 100 research institutions, including 77 doctoral-degree granting universities, which manages and operates the National Center for Atmospheric Research (NCAR) on behalf of the National Science Foundation.

I urge the Subcommittee to provide the maximum amount of support possible for the vital research and education programs administered by the National Science Foundation (NSF), the National Aeronautics and Space Administration (NASA), and the National Oceanic and Atmospheric Administration in fiscal year 2014.

The Importance of Our Research and Education Investment

As last October's Hurricane Sandy moves to its rightful place in the annals of historic storms, we should stop and ask what the impact of Sandy would have been on the mid-Atlantic section of this country if the storm had hit in October 1963 – 50 years earlier.

It might have disrupted the famed 1963 World Series between the Dodgers and the Yankees – the series that saw Sandy Koufax, Don Drysdale, Johnny Podres, and Ron Perranoski combine to give up only four runs in four games. Or it might have played havoc with the Giants-Cowboys football game at Yankee Stadium, which the Giants won 37 to 21 with Y.A. Title throwing 4 touchdowns.

Or it just might have killed tens of thousands of people living on the eastern seaboard.

Fifty years ago, hurricane advisories extended only two days into the future, computer models and weather satellites were in their infancy, and forecasters might not have expected Sandy's unprecedented westward curve into New Jersey. We did not have the sophisticated weather information system that made it possible for the National Weather Service, university researchers, and private sector forecasters to make the call on Sandy as early, as often, and as accurately as they did so that residents and businesses had sufficient warning to prepare and take shelter. While not perfect, these forecasts undoubtedly made a life or death difference for millions of people.

How did we as a society end up with a sophisticated weather enterprise that could make such an accurate, lifesaving call?

The short answer is that we – society – invested in science, technology, and education. This includes everything from basic research in mathematics and computer science to the development of satellites and parachute-borne instrument packages that could make vital observations. It also includes the ability to stream the information into supercomputers so that the data could be turned into useful guidance.

These advances are critically important, because we are probably more vulnerable to severe storms today than we were in 1963. Over the last few years, we have seen the deadliest hurricane and deadliest tornado outbreak since the early 20th century. We now have many more people living in coastal areas. We are highly dependent on an instantaneous communication system easily disrupted by such a storm. We are also dependent on the power grid for everything from transportation to commerce to sophisticated medical care – all of which is extremely vulnerable to such storms.

Frankly, the Nation should be grateful that the Congress has steadfastly provided public resources that led to the creation of today's research and education enterprise.

But it was not just the investment in the physical and mathematical sciences or satellite technology that delivered this life-saving information. It was also our investment in environmental sciences – including weather, climate, ocean and coastal research – as well as the social sciences that examine how people respond to warnings. Together, this knowledge enabled state and local emergency managers and first responders to prepare and inform citizens in a way that saved lives. And it was the innovative technologies allowing the complex web of data to be presented in a manner that most people—with or without smart phones—could understand.

The Administration and the Congress are embroiled in a high stakes debate regarding spending and tax policy that will affect nearly every citizen today – but also future generations of citizens. As part of that ongoing debate we are going to scale back federal spending in nearly every part of the budget – including research and development.

At a time when science is growing more and more capable of laying the groundwork for seven-day hurricane forecasts and even more accurate predictions of landfall location and storm surges, is reducing our investment in science and technology really the best way to learn from a storm that threw the nation's largest city into turmoil and disrupted countless lives?

We should use Hurricane Sandy as one of those teachable moments to ask: Are we doing enough to upgrade our capability to forecast the storms of tomorrow? And are we investing sufficiently in our research enterprise and our educational system to help us achieve that important capability? And are we really about to start walking away from the investments we have made over the last 50 years to build our research enterprise that is the key for the Nation's future economic and national security?

This Subcommittee and the rest of your Congressional colleagues have an almost impossible and thankless task – to make extremely difficult and far reaching decisions in the face of uncertainty and international competition. I hope you will be able to see your way clear to continue to invest in the Nation's research and education enterprise despite these difficult circumstances so that 50

years from now, our children and their children will find themselves living in world filled with economic opportunity, environmental stability, improved health care, and a more secure future.

Thank you for the opportunity to present these views. I would be happy to answer any questions the Members of the Subcommittee may have.

Mr. WOLF. Thank you very much for your testimony. I appreciate it very much.

Dr. Jonathan Lynch, American Society of Plant Biologist, professor of plant nutrition, Penn State University. Welcome.

THURSDAY, MARCH 21, 2013.

AMERICAN SOCIETY OF PLANT BIOLOGISTS

WITNESS

DR. JONATHAN LYNCH, PROFESSOR OF PLANT NUTRITION

Dr. LYNCH. Thank you, good afternoon, Mr. Chairman.

Mr. WOLF. There must be snow on the ground in Happy Valley now isn't there?

Dr. LYNCH. There is. It is surprisingly cold.

Mr. WOLF. Yeah.

Dr. LYNCH. Thank you for inviting me to testify on the fiscal year 2014 NSF budget.

My name is Jonathan Lynch, professor of plant nutrition at Penn State University.

I appear before you today on behalf of the American Society of Plant Biologists, 4,500 researchers and educators from around the U.S. and around the globe.

Our goal is to promote research and education on plant biology and promote the interests of plant scientists.

First of all we would like to thank you very much, thank this committee for its strong support of NSF budget last year.

We recognize as we have discussed several times in this session the dire fiscal constraints that we are confronting as a Nation for these discretionary funds; however, we also believe, as I believe I believe you share, that these investments are critical for economic, you know, revival and global competitiveness.

NSF supported research in plant biology is developing more sustainable ways to produce food, fiber, fuel, and a sustainable way national resource management and making basic scientific discoveries that are important for human health and nutrition.

Because of this we hope that your strong support for NSF budget will continue in this fiscal year.

I would like to share with you just an example of what NSF funding has meant for my own research program.

My goal is to develop crops with greater tolerance to drought and low soil fertility. That is important in developing countries where these are primary constraints to food security and they are important in the United States since drought is the principal risk to crop production and fertilizer is the principal cost both environment and economic cost of crop production.

NSF investments in our program over the past 20 years have enabled us to develop new varieties of common bean and soybean that have double and tripled the yield of previous varieties under these stressful conditions that are being grown throughout the world.

We have discovered traits, that root traits of corn that allows these plants to grow much better under drought and low soil fer-

tility that are being used to breed better crops for Africa and are of interest to the U.S. seed industry.

These crop improvements will be important assets in the future when agriculture will have to sustain a larger population with improved—with increased input costs and the likelihood of more extreme weather.

The NSF directorate to biological sciences (BIO) is of course the main funder of non-medical biological research in U.S. colleges and universities. Plant biology research under BIO, such as bread basic research to enable agricultural development, which is a partnership with the Bill and Melinda Gates Foundation, and the plant research program have been very important in advancing this field.

Additionally, of course as has been mentioned before in the session, NSF is a major source of funding for turning an education of the scientific workforce.

Therefore, the ASPB urges the committee to support educational programs at NSF including graduate research fellowships, post-graduate fellowships, and early career fellowships.

Here again, I want to share with you briefly, my experience is very fortunate in my career I am able to work with young people who are very bright and motivated who are just itching to make an impact on these problems we face, and these types of programs with NSF are very important for the opportunities these people have to pursue their careers.

Of course America's challenges in energy, agriculture, and health cannot be solved in a few years, they require sustained investment as this committee is aware. And we believe these investments will yield results both in the near term and the long term.

Thank you very much.

[The information follows:]



American Society of Plant Biologists

Cultivating a better future through plant biology research

Official Written Testimony in support of the National Science Foundation's Fiscal Year 2014 Budget

Submitted to the Subcommittee on Commerce, Justice and Science, and
Related Agencies
Committee on Appropriations
United States House of Representatives
Washington, D.C.

Submitted by
Dr. Crispin Taylor, Executive Director, American Society of Plant Biologists
and
Dr. Jonathan Lynch, Member, American Society of Plant Biologists

March 15, 2013

On behalf of the American Society of Plant Biologists (ASPB), we submit this testimony for the official record to support the highest funding level possible for the National Science Foundation (NSF) for Fiscal Year (FY) 2014. ASPB and its members recognize the difficult fiscal environment our nation faces, but we believe that sustained investments in scientific research will be a critical step toward economic recovery and continued global competitiveness for our nation.

ASPB would like to thank the Subcommittee for its consideration of this testimony and for its strong support for the research mission of NSF.

Our testimony will discuss:

- Plant biology research as a foundation for addressing food, fuel, environment, and health concerns;
- The rationale for robust funding for NSF to maintain a well-proportioned science portfolio with support for all core science disciplines, including biology; and
- The rationale for continued funding of NSF education and workforce development programs that provide support for the future scientific and technical expertise critical to America's competitiveness.

ASPB is an organization of some 4,500 professional plant biology researchers, educators, graduate students, and postdoctoral scientists with members across the nation and

throughout the world. A strong voice for the global plant science community, our mission—achieved through work in the realms of research, education, and public policy—is to promote the growth and development of plant biology, to encourage and communicate research in plant biology, and to promote the interests and growth of plant scientists in general.

Food, Fuel, Environment, and Health: Plant Biology Research and America's Future

Plants are vital to our very existence. They harvest sunlight, converting it to chemical energy for food and feed; they take up carbon dioxide and produce oxygen; and they are the primary producers on which most life depends. Indeed, plant biology research is making many fundamental contributions in the areas of energy security and environmental stewardship; the continued and sustainable development of better foods, fabrics, and building materials; and in the understanding of biological principles that underpin improvements in the health and nutrition of all Americans.

In particular, plant biology is at the interface of numerous scientific breakthroughs. For example, with high throughput experimental approaches facilitating extraordinary syntheses of information that are NSF-supported, plant biologists are using computer science applications to make tremendous strides in our understanding of complex biological systems, ranging from single cells to entire ecosystems. Understanding how plants function ultimately will result in better and more productive crops, new sources of fuel, and the development of better medicines to treat diseases like cancer.

Despite the significant positive impact plants have on our nation's economy and in addressing some of our most urgent challenges, including food and energy security, federal investments in plant biology research are modest. Still scientists have maximized and leveraged this funding in order to understand the basic function and mechanisms of plants, providing a foundation for vital advances in practical applications in agriculture, health, energy, and the environment.

To address future societal challenges that might be mitigated through investments in plant biology research and to prioritize community research efforts, ASPB organized a two-phase Plant Science Research Summit held in September 2011 and January 2013. With funding from NSF, the U.S. Department of Agriculture, the Department of Energy, and the Howard Hughes Medical Institute, the Summit brought together representatives from across the full spectrum of plant science research to develop a ten-year consensus plan to fill critical gaps in our understanding of plant biology in order to address the grand challenges we face. As a research community, our vision is to create plant systems that are flexible and adaptable to new and existing challenges by increasing the predictive and synthetic abilities of plant biology. In achieving these goals, the plant science research community will make significant contributions to:

- exploring, conserving and utilizing our natural resources;

- protecting, maintaining and improving crop productivity; and
- creating new plant-inspired industries.

ASPB expects to publish a report from the Plant Science Research Summit in spring 2013. This report will further detail the plant science community's priorities and the key initiatives needed to address the grand challenges facing the nation.

Robust Funding for the National Science Foundation

ASPB supports continuing to increase funding for NSF and encourages proportional funding increases across all of the scientific disciplines NSF supports.

As scientific research becomes increasingly interdisciplinary with permeable boundaries, a diverse portfolio at NSF is needed to maintain transformational research and innovation.

NSF funding for plant biology specifically enables the scientific community to address cross-cutting research questions that could ultimately solve grand challenges related to a sustainable food supply, energy security, and improved health and nutrition. This notion is reflected in the National Research Council's report *A New Biology for the 21st Century* and the President's Council of Advisors on Science and Technology's (PCAST's) recent report *Agricultural Preparedness and the United States Agricultural Research Enterprise* and it will be addressed comprehensively in the Plant Science Research Summit's report. Additionally, ASPB enthusiastically supports the PCAST report's recommendation that calls for increased funding for NSF for basic science related to the agricultural sciences.

The NSF Directorate for Biological Sciences (BIO) is a critical source of funding for scientific research, providing 62 percent of the federal support for non-medical basic life sciences research at U.S. academic institutions and beyond. BIO supports research ranging from the molecular and cellular levels to the organismal, ecosystem, and even biosphere levels. These investments continue to have significant pay offs, both in terms of the knowledge directly generated and in deepening collaborations and fostering innovation among communities of scientists.

The Biological Sciences Directorate's Plant Genome Research Program (PGRP) is an excellent example of a high impact program that has laid a strong scientific research foundation for understanding plant genomics as they relate to energy (biofuels), health (nutrition and functional foods), agriculture (impact of changing climates on agronomic ecosystems), and the environment (plants' roles as primary producers in ecosystems). ***ASPB asks that the PGRP be funded at the highest possible level and have sustained funding growth over multiple years to address 21st century challenges.*** Furthermore, in light of the need to create cyberinfrastructure across a wide range of scientific disciplines, ASPB supports efforts to homogenize metadata formats and enhance data sharing.

Without significant and increased support for BIO and the NSF as a whole, promising fundamental research discoveries will be delayed and vital collaborations around the edges of scientific disciplines will be postponed, thus limiting the ability to respond to the pressing scientific problems that exist today and the new challenges on the horizon. Addressing these scientific priorities also helps improve the competitive position of the United States in a global marketplace.

Continued Support for NSF Education and Workforce Development Programs

The National Science Foundation is a major source of funding for the education and training of the American scientific workforce and for understanding how educational innovations can be most effectively implemented. NSF's education portfolio impacts students at all levels, including K–12, undergraduate, graduate, and postgraduate, as well as the general public.

As NSF embarks upon a new effort to rethink and improve graduate education in the United States, ASPB is supportive of new ideas that will enhance student learning, training, retention, access, and recruitment. Furthermore, ***ASPB urges the Subcommittee to support expanding NSF's fellowship and career development programs—such as the Postdoctoral Research Fellowships in Biology, the Graduate Research Fellowship (GRF) and the Faculty Early Career Development (CAREER) programs***—thereby providing continuity in funding opportunities for the country's most promising early career scientists. ***ASPB further encourages the NSF to develop "transition" awards that will support the most promising scientists in their transition from postdoctoral research to independent, tenure-track positions in America's universities.*** The NSF might model such awards after those the National Institutes of Health offers.

Furthermore, the nearly seven-year median for a life-science PhD in the United States contrasts with other nations where students specialize earlier, thus entering doctoral programs with more uniform and advanced scientific foundations. To focus more attention on new types of skills, such as private-sector experience and data-science training, NSF may wish to consider encouraging universities to tailor undergraduate curricula to allow committed students to enter PhD programs without needing a significant amount of textbook-style coursework. One way to do so would be to offer a seamless, seven-year curriculum that combines bachelor's and doctoral education, thereby making the career path more attractive and reducing costs to investigators, institutions, and funding bodies. NSF may wish to fund exploration and development of this kind of program or curriculum.

ASPB urges support for NSF to further develop programs aimed at increasing the diversity of the scientific workforce by leveraging professional scientific societies' commitment to provide a professional home for scientists throughout their education and careers and to help promote and sustain broad participation in the sciences. Discrete focused training

and infrastructure support programs for Hispanic Serving Institutions, Historically Black Colleges and Universities, and Tribal Colleges and Universities remain vitally important, because they foster a scientific workforce that reflects the U.S. population.

ASPB urges support for education research that enhances our understanding of how educational innovations can be sustainably and most effectively implemented in a variety of settings. NSF programs such as Transforming Undergraduate Education in STEM, Discovery Research K-12, and Widening Implementation and Demonstration of Evidence-based Reforms (WIDER) provide opportunities to expand NSF's research and evaluation efforts to address scale-up and sustainability. Additionally, investigating and supporting effective approaches toward rolling out across the K-16 continuum the new vision for undergraduate biology education articulated in the 2010 Vision and Change report are particularly valuable. ***ASPB encourages continued support for education research programs within NSF's Education and Human Resources portfolio with a focus on understanding how previous investments in educational strategies can be made most effective.***

Grand research challenges will not be resolved in a year, an administration, or a generation, but will take continued attention and investment at federal research agencies, such as the National Science Foundation, over decades.

Thank you for your consideration of our testimony on behalf of the American Society of Plant Biologists. Please do not hesitate to contact us if we can be of any assistance in the future.

Dr. Crispin Taylor
Executive Director
American Society of Plant Biologists

Dr. Jonathan Lynch
Member
American Society of Plant Biologists
and
Professor of Plant Nutrition
Pennsylvania State University

Mr. WOLF. Thank you. Thank you very much for your testimony.

Mr. CULBERSON. Mr. Wolf, one question?

Mr. WOLF. Sure, go ahead.

Mr. CULBERSON. Excuse me, very quickly.

How close are we to developing plants for hydrogen around the atmosphere?

Dr. LYNCH. Well, of course some plants can do that. Now the Gates Foundation has made a large investment just recently in trying to get corn to do that, and that is going to be a long-term project, a high risk project, but that could be a very significant advancement obviously. I would guess more like 25 years. Yes.

If it was easy for plants to do this they would have figured out how to do this already over 450 million years of evolution.

Thank you.

Mr. WOLF. Thank you.

Jeffery Rudolph of American Alliance of Museums.

THURSDAY, MARCH 21, 2013.

AMERICAN ALLIANCE OF MUSEUMS

WITNESS

JEFFERY RUDOLPH, PRESIDENT AND CEO, CALIFORNIA SCIENCE CENTER

Mr. RUDOLPH. Chairman Wolf, Mr. Culberson, thank you for inviting me to testify today.

I am Jeff Rudolph, president and CEO of the California Science Center.

I have previously served as chair of the board of the American Alliance and Museums and also the Association of Science Technology Centers.

I am here on behalf of the museum community, including the association of science museum directors to request that the subcommittee continue its strong support of informal STEM education by investing in the National Science Foundation's Advancing Informal STEM Learning or AISL program and informal science education efforts of NOAA and NASA.

AISL received \$61.4 million in fiscal year 2012. I strongly concur with the request made by Bud Rock, CEO of the Association of Science and Technology Centers, in his written testimony requesting report language to clearly direct NSF to return the focus of the AISL program to support a public engagement in science. This will reverse the recent trend of focusing AISL funding on formally university led research at the expense of effective educational and public engagement program and conduct it through museums and others such as public television and radio.

As you know STEM education is critical to our Nation's economic strength and global competitiveness. Museums throughout the country play a vital role in our Nation's STEM education efforts.

In its 2009 record learning science and informal environments the National Research Council and National Academies found powerful evidence in support of the value of and need for STEM learning in non-school settings. It also found that informal learning in

museums can have a significant impact on science learning outcomes for those historically under represented in the STEM fields.

At the California Science Center we serve about two million guests annually. Our sole focus is to stimulate curiosity and to inspire science learning. It is our expertise to communicate science and inspire interest in science.

We conducted 24 studies over a ten-year period in an effort to measure our impact on science learning in our community. The research which was recently published in the *Journal of Research on Science Teaching* found that we have had a significant impact on science learning with more than 79 percent of parents reporting their children's science center experience increased their interest in and understanding of science.

The impact of the California Science Center on children from under represented and low income families was found to be even greater.

Similar outcomes can be found in museums across the nation including the center at the Smithsonian and districts—museums across the country in almost all of your districts I believe.

AISL grants have provided critical investments in research and development of innovative and field advancing out of school STEM learning.

Support for programs such as the Franklin Institute Science and Museum and Prelibrary of Philadelphia's after-school program engaging children and families from diverse audiences in science and literacy's provide important support for advancing the field and our ability to inspire and motivate the next generation of scientists, engineers, and explorers.

Again, I appreciate the opportunity testify and I encourage you to recognize the importance of STEM education provided by museums and science centers across the Nation.

I also encourage your support of continued funding the AISL program at its current level, and inclusion of report language to clearly direct NSF to use the AISL program to continue support of engaging the public in STEM learning.

I would be happy to answer any questions.

[The information follows:]



American
Alliance of
Museums

Testimony by
Jeffrey Rudolph
President and CEO, California Science Center,
On behalf of the American Alliance of Museums
House Committee on Appropriations,
Subcommittee on Commerce, Justice, Science, and Related Agencies
March 21, 2013

Chairman Wolf, Ranking Member Fattah, and members of the Subcommittee, thank you for the opportunity to testify today. I am Jeffrey Rudolph, President and CEO of the California Science Center. I also previously served as Chair of the Board of the American Alliance of Museums, and am here to represent the Alliance and the larger museum community—including the Association of Science-Technology Centers—to request that the Subcommittee make a renewed investment in the **Advancing Informal STEM Learning (AISL) program at the National Science Foundation (NSF)**. We urge you to provide \$61.4 million, equal to the FY 2012 funding level, and to reject the President's Fiscal Year 2013 (FY13) budget request which called for only \$47.82 million, a significant, 22% decrease.

The American Alliance of Museums represents the full range of our nation's museums – including aquariums, arboretums, archaeological museums, art museums, botanical gardens, children's museums, culturally specific museums, historic sites, history museums, maritime museums, military museums, natural history museums, nature centers, planetariums, presidential libraries, science and technology centers, zoological parks, and other specialty museums – along with professional staff and volunteers who work for and with museums. The Alliance is honored to work on behalf of the 17,500 museums nationwide that employ 400,000 people, and annually spend over \$2 billion on K-12 educational programming, receive more than 90 million visits from primary and secondary school students, and directly spend \$21 billion in their local economies.

One of society's greatest challenges is determining how to engage the next generation in the sciences. Museums offer the perfect learning environment – where science, technology, engineering, and mathematics (STEM) education is brought to life through activities and experiences that build a lifetime of interest and enthusiasm for the sciences.

There is a growing consensus that whatever the new educational era looks like, it will focus on the development of a core set of skills: critical thinking, synthesizing information, ability to innovate and think creatively, and collaboration. Museums are uniquely situated to help learners develop these core skills. Millions of Americans of all ages and backgrounds already learn about STEM subjects each year by visiting museums, science centers, public gardens, zoos, and aquariums.



In 2009, the National Research Council of the National Academies released a report entitled *Learning Science in Informal Environments: People, Places, and Pursuits*, which found:

- “Each year, tens of millions of Americans, young and old, explore and learn about science by visiting informal learning institutions, participating in programs, and using media to pursue their interests.”
- “Do people learn science in nonschool settings? This is a critical question for policy makers, practitioners, and researchers alike – and the answer is yes.”
- “Designed spaces – including museums, science centers, zoos, aquariums, and environmental centers – can support science learning. Rich with real-world phenomena, these are places where people can pursue and develop science interests, engage in science inquiry, and reflect on their experiences through sense-making conversations.”
- “Virtually all people of all ages and backgrounds engage in informal science learning in the course of daily life. Informal environments can stimulate science interest, build learners’ scientific knowledge and skill, and – perhaps most importantly – help people learn to be more comfortable and confident in their relationship with science.”
- “Informal environments can have a significant impact on science learning outcomes for those who are historically underrepresented in science.”

NSF is providing crucial funding to support museums’ educational missions and efforts to improve STEM education.

The mission of NSF’s Directorate for Education and Human Resources (EHR) is to achieve excellence in U.S. STEM education at all levels and in both formal and informal settings in order to support the development of a diverse and well-prepared workforce of scientists, technicians, engineers, mathematicians and educators and a well-informed citizenry that have access to the ideas and tools of science and engineering. The purpose of these activities is to enhance the quality of life of all citizens and the health, prosperity, welfare and security of the nation.

EHR’s Advancing Informal STEM Learning program—funded at \$61.4 million in FY12—invests in research and development of innovative and field-advancing out-of-school STEM learning and emerging STEM learning environments. AISL invests in four types of projects that are specific to the program: Research; Pathways; Full-Scale Development; and Broad Implementation.

In addition to AISL, the Directorates for Biological Sciences; Education and Human Resources; Geosciences; and Social, Behavioral & Economic Sciences have all supported museums in the areas of field and collections-based research, collections improvements and digitization, database development, and educational programming. Museum exhibitions and educational programs and resources are built on a firm foundation of research, and museum researchers are making major original contributions to the understanding of important issues such as changes in climate, environments, biodiversity, and human culture. I urge the Subcommittee to fully fund these important directorates.



Following are two examples of how NSF-AISL is helping museums provide increased access to their unique resources and fulfill their potential in educational improvement.

Example #1: The Franklin Institute Science Museum/Free Library of Philadelphia, PA

LEAP into Science is a partnership between the Alliance-accredited Franklin Institute Science Museum and the Free Library of Philadelphia that engages children and families in science and literacy by integrating hands-on science activities with children's literature. This effort was supported by a \$1.2 million 5-year NSF grant which was awarded to build a model museum/library partnership to promote science and literacy.

The Franklin Institute's strength in science programming and the Library's expertise in children's literature result in an innovative afterschool program connecting books and science. The library environment is an ideal setting for informal science programs. With ready access to books and the Internet, and a desire to support kids' scientific exploration, libraries can provide educational science opportunities for children and families during after-school hours and on evenings or weekends. *LEAP into Science* aims to inspire exploration and questioning, providing opportunities for children and families to think like scientists and investigate scientific phenomena with familiar materials and relevant children's fiction and nonfiction books.

LEAP into Science aims to achieve the following impacts:

- Increase science interest, understanding, and engagement by involving underserved families in cross-generational science and literacy experiences;
- Make science accessible to a diverse audience by bringing science activities into community settings; and
- Build community capacity and provide training and experience in informal science and literacy connections to library afterschool staff and children's librarians.

LEAP into Science curriculum resources consist of afterschool workshops designed for children grades K-4 which integrate hands-on science activities and children's books, family workshops which engage children and adults in tabletop science activities linked with related children's books, as well as science bookmarks and exploration cards which extend learning in the home environment.

Another central goal of *LEAP into Science* is to demonstrate how museums, libraries, and other educational institutions can work together to enhance the capacity of urban communities to engage children and families in science. In 2011 and 2012, *LEAP into Science* expanded to 10 new sites nationwide to broaden the reach of this powerful effort.

**Example #2: Exploratorium, San Francisco, CA**

The Exploratorium, in collaboration with the Boys and Girls Club Columbia Park (BGC) in the Mission District of San Francisco, received a \$525,000 grant in 2012 to implement a two-year exploratory project that supports informal STEM education within underserved Latino communities. Building off of and expanding on non-STEM-related efforts in a few major U.S. cities and Europe, the Exploratorium, BGC, and residents of the District engage in a STEM exhibit and program co-development process that physically converts metered parking spaces in front of the Club into transformative public places called "parklets." The BGC parklet features interactive, bilingual science and technology exhibits, programs and events targeting audiences including youth ages 8 - 17 and intergenerational families and groups primarily in the Mission District and users of the BGC. Together, participants explore concepts underlying the science of sustainability and how patterns and processes at the local and regional scales are inextricably linked to global phenomena. With STEM education's critical role in the twenty-first century economy, programs like this one, that bring critical skills and experiences to underserved communities, are vital both to those they serve and to our economic future.

Conclusion

I appreciate the opportunity to present these views today, and urge the Subcommittee to fund the AISL program at \$61.4 million -- equal to the FY 2012 funding level-- so we can continue to inspire young and old in science, technology, engineering, and mathematics and fulfill our potential of improving the educational landscape.

Mr. WOLF. When I was a kid I used to go to the Franklin Institute a couple times a year.

Mr. RUDOLPH. Great.

Mr. WOLF. It was amazing.

Anyway, I appreciate your testimony, I am very grateful. Thank you very much.

Mr. RUDOLPH. Thank you. Thank you.

Mr. WOLF. The last witness, I think the drum roll comes with Christopher Lawson, Ph.D., Alabama Experimental Program to Stimulate Competitive Research. And you are the last one. But it says in the Bible "the last shall be first."

THURSDAY, MARCH 21, 2013.

ALABAMA EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE RESEARCH

WITNESS

CHRISTOPHER LAWSON, PH.D., EXECUTIVE DIRECTOR

Mr. LAWSON. That is right. So I appreciate the drum roll.

So, Mr. Chairman and members of the subcommittee my name is Christopher Lawson and I am the physics professor at UAB, the University of Alabama at Birmingham.

Mr. WOLF. Do you have a football team down there?

Mr. LAWSON. No, that is the one at Tuscaloosa.

Mr. WOLF. Oh, you are in Birmingham.

Mr. LAWSON. That is right. And I also serve as executive director of Alabama EPSCoR.

So thank you for this opportunity to testify about NSF EPSCoR and NASA EPSCoR, and for fiscal year 2014 we respectfully request the \$160 million for the NSF EPSCoR budget and \$25 million for the NASA EPSCoR budget.

Congress established the EPSCoR program to ensure that research universities in all states participate in federal science and technology activities. Although EPSCoR states have 20 percent of the Nation's population and close to 25 percent of the doctoral research universities these states only receive about 10 percent of the federal research outlays. EPSCoR provides a mechanism to address these geographic imbalances.

The program has been a huge success, investments have generated growth in state economies, attracted students in the STEM fields, and created a broader base of high-tech research expertise.

In my home state of Alabama NSF EPSCoR funding has generated revolutionary advancements in science and engineering that led to new business growth and new jobs. For example, EPSCoR funded research at UAB has ceded a new type ultra sensitive laser optical nose that can sniff environmental toxins from spills caused by natural disasters, it may also able enable long-range laser sniffing of explosives such as roadside IEDs to protect our troops.

This new technology led directly to the creation of new multi-million dollar start up company in Alabama.

NSF EPSCoR dollars have introduced more than 2,000 individuals across Alabama to science and technology concepts in the last year alone.

In a time when the President and Congress talk about the urgency of getting more of our students engaged in STEM fields it only makes sense to build on this success by continuing to fund NES EPSCoR at \$160 million.

Like its NSF companion Congress designed NASA EPSCoR to increase the research capacity of states with little NASA research involvement.

The program helps states compete for funding in areas that are directly relevant to NASA's mission in earth and space science, human space flight, and aerospace technology. For example, NASA EPSCoR research at the University of Alabama, the one with the football team, on fluid dynamics has potential to reduce air flow drag by 30 percent. A one percent reduction in drag can save an airline company \$100,000 to \$200,000 in fuel per year per aircraft, thus this research could ultimately reduce the Nation's dependency on fossil fuels, CO₂ emissions in the atmosphere, and of course reduce cost.

Funding the NASA EPSCoR program at last year's request level of \$25 million will help to development additional new types of NASA-related technologies for additional economic growth.

At a time of economic challenge and tight budgets that you have talked about so much programs like EPSCoR that seek a broader distribution of research funding makes solid fiscal sense. Limiting these resources to only a few states and institutions is self-defeating for our Nation in the long run.

NSF and NASA EPSCoR help all states to benefit from taxpayer investments and federal research and development and they generate long-term growth in a skilled workplace for the future.

NSF and NASA EPSCoR stretch limited federal dollars farther through state matching. Not only do states benefit from increased research capacity and growth, but our Nation benefits from the rich and diverse pool of talent that our entire country can provide.

At a time when 33 percent of all bachelor's degrees in China are in engineering compared to four and a half percent in the U.S., if we are to remain globally competitive instead of restricting ourselves to only a few states and a few institutions we need to be training and harnessing all of our Nation's brain power and EPSCoR working to achieve that goal.

I thank you for inviting me to testify.

[The information follows:]

Testimony of Christopher M. Lawson, Ph.D.
Executive Director, Alabama EPSCoR
Director of the Graduate Research Scholars Program
Professor, Department of Physics, University of Alabama at Birmingham

Submitted to the House Committee on Appropriations
Subcommittee on Commerce, Justice, Science and Related Agencies
March 21, 2013

Mr. Chairman and Members of the Subcommittee, my name is Christopher Lawson and I am the Executive Director of the Alabama Experimental Program to Stimulate Competitive Research (Alabama EPSCoR). I am also a professor of physics at the University of Alabama at Birmingham (UAB). Thank you for this opportunity to testify today regarding the National Science Foundation's (NSF) and the National Aeronautics and Space Administration's (NASA) EPSCoR programs. For Fiscal Year 2014, we respectfully request that you fund the NSF EPSCoR program at last year's funding level of approximately \$160 million, and fund the NASA EPSCoR program at last year's request level of \$25 million.

Congress established the EPSCoR program to ensure that research universities in all states participate in and benefit from Federal science and technology activities. Although EPSCoR states have 20% of the nation's population, and close to 25% of its doctoral research universities, these states only receive about 10% of the Federal research outlays. EPSCoR provides a mechanism to address these geographical imbalances. The program has been a huge success—investments have generated growth in state economies, attracted students into STEM fields, and created a broader base of research expertise available to the agencies to meet their missions.

Ensuring that we have a national research community and strengthening the EPSCoR program is, in my opinion, more important than ever. In an increasingly competitive world, we need the talents and expertise of all our states and people. The EPSCoR states have provided a sizeable number of our nation's scientists and engineers and supported our nation's industries and government activities from the Corps of Engineers projects to space launches. We need to continue this work.

When our nation seeks a broader geographic distribution of research funding through a program like EPSCoR, our states are more economically viable locally and regionally. Several states have noted that the development of research concentrations and business clusters has led to increased economic activity and new jobs. In a knowledge-based society, where technology changes rapidly, it is essential that faculty in all parts of the nation are engaged in research that keeps them current in their field and provides students with the latest scientific advances. Today, the opportunities for our citizens to benefit from scientific and technological developments are perhaps greater than ever before. At the same time, investments in equipment, computing, networking, expertise and other resources requires far more resources than it has in the past. Limiting these resources to a few institutions is self-defeating for our nation -- and 27 states -- in the long run.

NSF EPSCoR is a proven program that Congress created with the stated goals of “providing strategic programs and opportunities for EPSCoR participants that stimulate sustainable improvements in their R&D capacity and competitiveness, and advance science and engineering capabilities in EPSCoR jurisdictions for discovery, innovation, and overall knowledge-based prosperity.” There are currently 27 states and 2 jurisdictions that participate in EPSCoR.

NSF provides funding through the EPSCoR Research Infrastructure Improvement (RII) awards. These awards are divided into two tracks—track-1 awards provide up to \$4 million annually to support academic research infrastructure improvement in R&D areas critical to a state’s competitiveness and economic development. Track-2 awards provide up to \$2 million annually to support enhancements in the development of broadband connections and cyberinfrastructure components of EPSCoR states to promote cyberinfrastructure based research and education. Importantly, NSF EPSCoR funding is matched by the states, and in this way the states are helping to leverage Federal investments to deliver results.

A second NSF EPSCoR funding mechanism is “co-funding”, where a proposal submitted according to normal NSF procedures is eligible to be

partially funded from NSF EPSCoR if the applicant is from an EPSCoR state.

In my home state of Alabama, NSF EPSCoR funding has generated revolutionary advancements in science and engineering that have led to new business growth and high-paying jobs. For example, EPSCoR funded research at UAB has seeded the development of a new type of ultra-sensitive laser based sensor, an “optical nose”, that can be used to detect and characterize environmental toxins from spills caused by natural disasters. The same technology could ultimately be used for medical diagnosis of diseases such as lung cancer by the rapid analysis of the breath of patients during routine visits to the dentist. Finally, it may enable remote “sniffing” of explosives for detection of improvised explosive devices (IUD’s). This new technology led directly to the creation of a new multi-million dollar startup company in Alabama.

As another example, current composite materials are petroleum based with synthetic fibers that require large amounts of energy to produce. NSF EPSCoR funded research at Tuskegee University has led to advanced green composites that use plant oil based polymers and fibers. These materials will lead to reduced dependency on fossil fuels, and because they are biodegradable, they will not have to end up in landfills like traditional composite materials.

NSF EPSCoR dollars have also been central to the dissemination of STEM ideas to students, teachers, and industry officials. EPSCoR infrastructure programs introduced more than 2,000 individuals across Alabama to science and technology concepts in one year alone. In a time when the President and Congress talk about the urgency of getting more of our students engaged in STEM fields, it only makes sense to build on this success and continue to fund the NSF EPSCoR program.

Continuing to fund NSF EPSCoR at last year’s funding level of \$160 million will ensure that states such as Alabama continue to develop a robust research infrastructure so that they can compete for Federal research grants and continue to prepare a skilled, “high tech” workforce capable of delivering innovation in the future.

For NASA EPSCoR in FY 2014, we respectfully ask for funding at last year's request level of \$25 million. Like its NSF companion, Congress designed NASA EPSCoR to increase the research capacity of states that traditionally have had limited NASA R&D funding. The program helps states compete for funding in areas that are directly relevant to NASA's mission in earth and space science, human spaceflight, and aerospace technology.

NASA EPSCoR uses two funding mechanisms to carry out the program. The first, the Research Infrastructure Development Cooperative Agreement Awards (RID), provide up to \$125,000 to participating states to improve research capacity. The second, the Cooperative Agreement Notice (CAN) Awards, allocate up to \$750,000 over a 3-year period for research projects. Together, they attract students into STEM fields, allow more states to participate in NASA's research enterprise, and provide opportunities for high tech economic growth in local communities nationwide. Like the NSF EPSCoR program, states help increase the Federal benefit by matching funds. It is truly a "win-win" program for states and our nation.

In Alabama, NASA EPSCoR funding has allowed researchers in the state to team up with officials at the Marshall Space Flight Center to work on solutions for our nation's space program. EPSCoR researchers are developing shape alloys, a unique and revolutionary class of materials that can recover from structural loads. These materials have the potential for future applications in higher temperature applications, such as those used in aerospace. The research that the program funds enhances Alabama's capabilities and also contributes to NASA's mission.

As another example, NASA EPSCoR research at the University of Alabama on fluid dynamics has the potential to reduce airflow drag by 30%. A 1% reduction in drag can save an airline company \$100,000 to \$200,000 in fuel per year per aircraft. Thus, this research could ultimately reduce the nation's dependency on fossil fuels, CO₂ emissions into the atmosphere, and costs.

Funding the NASA EPSCoR program last year's request level of \$25 million would allow NASA to maintain the RID awards at \$125,000 per year for participating states and provide additional Implementation grants to seed important national research. With this program, the funding level directly

impacts the number of research grants that can be awarded in a single year. Since the purpose of the program is to broaden the research base, the more research grants that can be funded, the better.

At a time of economic challenges and tight budgets, programs like EPSCoR that seek a broader distribution of research funding make solid fiscal sense. Limiting these resources to a few states and institutions is self-defeating for our nation in the long run. NSF and NASA EPSCoR help all states to benefit from taxpayer investments in Federal research and development, and they generate long-term growth and a skilled workforce for the future. NSF and NASA EPSCoR stretch limited Federal dollars further through state matching. Not only do states benefit from increased research capacity and growth, but our nation benefits from the rich and diverse pool of talent that our entire country can provide. In a time that 33 percent of all bachelors degrees in China are in Engineering, compared to 4½ percent of bachelor degrees in the U.S., if we are to remain globally competitive, instead of restricting ourselves to a few states and institutions, we need to be training and harnessing all of our nation's brainpower, and EPSCoR is working to achieve this goal.

Thank you for inviting me to testify before the subcommittee today.

Mr. WOLF. Well, Mr. Rudolph thank you very much and I want to thank you for your testimony.

I want to thank all our witnesses that have testified here today. It has been a very compelling day. But thank you very much.

Mr. RUDOLPH. Thank you.

Mr. WOLF. And with that the hearing is adjourned.

STATEMENTS SUBMITTED

FOR THE RECORD

Testimony for Fiscal Year 2014 NASA Budget
Submitted to the Subcommittee on Commerce, Justice, Science, and Related
Agencies
Committee on Appropriations
United States House of Representatives
Washington, D.C.

Submitted by
Representative Judy Chu

March 21, 2013

Chairman Wolf, Ranking Member Fattah, and Members of the Subcommittee: Thank you for the opportunity to testify on the National Aeronautics and Space Administration's Fiscal Year 2014 budget. I ask you to support Planetary Sciences at NASA at the level of \$1.45 billion, slightly below the enacted funding levels for Fiscal Year 2011 and 2012, yet would allow the U.S. to continue to explore our Solar System and keep the knowledge and technical capability to do so right here in the United States, instead of overseas.

I represent California's 27th district in Los Angeles County, which now includes Pasadena and the California Institute of Technology (Caltech). As you know, Caltech manages NASA's Jet Propulsion Laboratory (JPL), just blocks from my district line in my esteemed colleague, Adam Schiff's district. Caltech and JPL are extremely important to the new and old communities I am proud to represent, and to the region at large, employing over 5,000 Angelinos directly, with high-skilled jobs. In fact, because of the impact, expertise, and research produced by Caltech and JPL, the San Gabriel Valley is considered the brain trust of the L.A. area.

Decades ago the race to land a man on the Moon captivated our nation and inspired a generation of scientists and engineers. Today, robotic exploration of Mars is fascinating Americans anew with extraordinary achievements like the Mars Curiosity Rover, also named the Mars Science Laboratory. In fact, the Mars Exploration program has been one of NASA's treasures, producing many of its most awe-inspiring achievements over the last decade. Curiosity's spectacular "blind" landing was in itself a remarkable achievement celebrated around the world. Ever since, Curiosity, with its "on board" science lab capable of collecting and analyzing rock and soil samples on site, has been making discoveries and sending stunning information back to Earth. Most recently, it discovered evidence that water safe enough to drink once existed on the Red Planet. This groundbreaking discovery occurred just over six months after Curiosity arrived on Mars. There can be no doubt that this is one of America's best investments, and a shining example of how NASA's Planetary Science program continues to make scientific breakthroughs that "wow" us all.

To the people of my district and throughout the region, this high-skilled work means jobs at Caltech and JPL, and in countless spin-off industries and businesses, as well as indirect jobs throughout the community. These people shop, invest, and pay taxes in the community, making Caltech's work with NASA a major part of the local and regional economy. Yet the benefits do

not stop there. The spin-off technologies created by the Mars program and other Planetary Science work at JPL can translate to skilled jobs throughout the U.S. The need for experts in science, technology, mathematics and engineering that a sustained Mars program and Planetary Exploration demand translates to the kind of emphasis on education that has long made America the global leader in innovation, discovery and development. These are exactly the kinds of jobs America needs to protect and promote to spur innovation and real economic growth.

As you know, JPL scientists and engineers are the only people in the world who have successfully landed a mission on Mars. This is an unparalleled brain trust whose capacity and experience we cannot simply turn on and off, and we cannot afford to lose. But their unique capability to perform high-end entry, descent, and landing is at risk. Last year, the disproportionate cuts proposed to NASA's Planetary Science budget would have devastated JPL's workforce, forcing these best and brightest to look elsewhere for work and threatening America's intellectual capital. Thankfully, with your vital help, the House and Senate were able to restore enough funding to allow the Mars program to continue. However, it is expected that the President's proposed budget for Fiscal Year 2014 will cut the overall Planetary Science budget again, threatening to cripple missions like Mars and possibly lead to an imbalance in the prioritization of projects that is not in line with the National Research Council's Decadal Survey.

The Decadal Survey for Planetary Science (*Vision and Voyages for Planetary Science in the Decade 2013-2022*)—released in March, 2011 and authored by the nation's most preeminent planetary scientists—sets as the field's highest priority a Mars rover mission in 2018 that would lead to bringing back rock and dust samples to Earth. This mission, along with other critical Planetary Science missions, would preserve America's global technological and scientific leadership while maintaining the unique capabilities built over the last sixty years.

We cannot let NASA's dominance in planetary exploration slip, especially as other countries are challenging our leadership. NASA's Space Science program has been successful over the last 20 years because its balance has allowed the scientific community to plan future missions while encouraging new scientists to enter the field. We all know tough cuts needs to be made, but we must insist on a balance approach. The reality is that these missions constitute long-term commitments and investments we have already made. To sacrifice their ability to continue now would create waste, and that is no way to balance the budget.

We need to set priorities and make difficult choices, but game-changing technologies and innovations must remain at the top. The technologies developed to execute these missions are important economic drivers and play a role in Americans' everyday lives. Mars mapping technology developed at JPL is used to conduct high-resolution 3D mapping here on Earth by businesses, emergency managers, and policy makers.¹ Additionally, the technology generated from building the Mars rovers at JPL has led to the creation of military combat robots used by American service members in Iraq and Afghanistan to search buildings and clear caves and bunkers, while keeping American troops out of harm's way.² These cutting-edge spinoffs are

¹ *Mars Mapping Technology Brings Main Street to Life*. NASA: Spinoff 2008. Web. 2008. Web. 09 March 2012. http://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/20090002482_2009001785.pdf.

² *All-Terrain Intelligent Robot Braves battlefront to Save Lives*. NASA: Spinoff 2005. 2005. Web. 08 March 2012. http://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/20060022037_2006145860.pdf.

important economic drivers, many of which support small businesses—a key player in today’s economic recovery.

Planetary Science missions, such as Mars and Europa—a mission to Jupiter’s moon—are key recommendations from the National Research Council’s Planetary Science Decadal Survey. These planetary expeditions, like the Mars Sample Return and a journey to Europa, not only provide an economic return on investment, but they also help humankind understand the universe and our place within it. Again, I ask you to support Planetary Sciences at NASA at the level of \$1.45 billion, slightly below the enacted funding levels for Fiscal Year 2011 and 2012, yet would allow the U.S. to continue to explore our Solar System and keep the knowledge and technical capability to do so right here in the United States, instead of overseas.

At a time when Americans are looking for its leaders to grow the economy and help create job opportunities, to protect and expand American leadership, and while many of our partners and competitors alike are expanding their investments in space exploration and technology, it does not make sense to cut one of our most promising and successful NASA programs.

I hope this committee will carefully weigh the benefits of the Mars program as it considers the Fiscal Year 2014 budget.

Thank you.



Congress of the United States

House of Representatives

Congressman David N. Cicilline (RI-01)

**Members and Outside Witness Written Testimony: FY 14 Appropriations
Submitted to the House Committee on Appropriations Subcommittee on Commerce,
Justice, Science, and Related Agencies**

Thank you Chairman Wolf, Ranking Member Fattah, and members of the Subcommittee on Commerce, Justice, Science, and Related Agencies (CJS) for affording me the opportunity to provide testimony regarding FY 2014 CJS Appropriations. While there are many vital programs under your purview that keep our communities safe and advance the growth of our economy, there are three initiatives within the Department of Commerce in particular that I would like to highlight as vitally important in the effort to create jobs and grow the economy in my state of Rhode Island and in our nation. Within the National Institute of Standards and Technology (NIST), I encourage you to support the Hollings Manufacturing Extension Program (MEP) and the National Network for Manufacturing Innovation (NNMI). In addition, I respectfully urge funding in the amount of \$25 million for the Regional Innovation Program within the Economic Development Administration (EDA). These are critically important investments to sustain our economic recovery, particularly for the State of Rhode Island where our recovery remains fragile and the unemployment rate as of January 2013 was the highest in the nation at 9.8%.

I want to first address the importance of the manufacturing sector to the nation's economy. Manufacturing has been a driver of our economy for centuries and remains a vitally important industry in helping to maintain the United States' position as a leader in the global economy. In my home state of Rhode Island, we have experienced a dramatic and steady decrease in manufacturing employment over the past several decades. Yet, despite these losses, with more than 41,000 workers, manufacturing remains the fourth-largest private employment sector in the Rhode Island economy. From its impact on research, development and innovation; to the high wage jobs it provides; to its role in our nation's defense and helping bring greater balance in trade – we have a responsibility to work collectively in ensuring a healthy manufacturing sector.

We must take this opportunity to support the growth of the manufacturing sector by advancing programs that improve efficiency and effectiveness in this industry. Through the National Institute of Standards and Technology's Hollings Manufacturing Extension Partnership, small and medium sized manufacturing firms are given the tools and expertise to improve productivity and competitiveness. Since 1996, several hundred manufacturers have worked alongside partners

and experts at Rhode Island Manufacturing Extension Services (RIMES), helping produce astounding economic benefits for the state and our manufacturing industry. During this time when Congress is making the difficult choices required to lower the deficit, we also need to sustain those investments that help us create jobs, innovate for the future, and remain competitive in the global marketplace. This program is one of them. For every \$1 of federal investment, the Manufacturing Extension Partnership delivers \$32 in economic growth. By focusing on the power of innovation, the MEP supports those manufacturers that are likely to be more successful and to realize greater opportunities to participate in the global economy.

At the same time, we must ensure that our manufacturers have the resources to out-innovate their global competitors, and transform research into marketable products and services. In FY 13, The President called for the creation of a \$1 billion account to establish a National Network for Manufacturing Innovation. Now, more than ever, we need to support efforts that bring together researchers, manufacturing firms, government partners, entrepreneurs, education institutions, and the diverse array of stakeholders in local and regional economic development to advance the common goal of improving the competitiveness of our manufacturing sector. Similar to the tenets within legislation that I have introduced, H.R. 375 - The Make It In America Manufacturing Act, NNMI is an opportunity to create public-private partnerships, enhance workforce skills, encourage innovation, and turn cutting-edge ideas into new products – thereby strengthening the nation’s manufacturing sector and putting more Americans back to work in well-paying jobs. I strongly support robust funding for this initiative, which will empower state, local, and regional partners, bolster the competitiveness of domestic manufacturers, spur the creation of new products and businesses, strengthen this vital sector of our economy, and help create and sustain manufacturing jobs here in America.

Similarly, in an effort to drive innovation and regional collaboration, the America COMPETES Act of 2010 mandated the creation of a Regional Innovation Program within the Economic Development Administration. This initiative encourages and supports the development of regional innovation strategies, including science and research parks and regional innovation clusters - networks of interconnected firms and institutions working to accelerate job growth, business formation and expansion, innovation, workforce training, and small business development.

The EDA has partnered with eight other agencies and authorities, including the Employment and Training Administration, the Small Business Administration, and NIST-MEP, to promote regional collaboration. Funding for the Regional Innovation Program would support EDA’s interagency effort to build regional innovation clusters, as demonstrated by their Jobs and Innovation Accelerator Challenge, a grants program initiated in 2011 to support job creation and economic growth in some of our hardest hit communities. This competitive interagency grant supports the advancement of high-growth, regional industry clusters. The Challenge aggregates existing investments and technical assistance from multiple federal agencies to strengthen regional industry clusters. Most importantly, the Challenge not only encourages interagency collaboration, but also incentivizes public-private partnerships, thereby leveraging private funding.

Through the Challenge, local leaders are empowered to maximize existing assets and are provided resources to ensure that historically underrepresented communities, including those hardest hit by unemployment and economic deterioration, are able to participate in and benefit from growth in the regional cluster. The Jobs and Innovation Accelerator Challenge awarded its first round of grants in 2011 to twenty separate projects, and has completed two additional rounds of funding to-date. Most recently, the Department of Commerce, along with NIST-MEP and the Department of Labor, have partnered to provide \$40 million in competitive grant funding for a Make It In America Challenge to encourage insourcing of manufacturing by U.S. companies as well as assist manufacturers here at home to expand their businesses, train workers, and create jobs. Funding the Regional Innovation Program at a minimum of \$25 million will allow EDA to continue its investment in high-growth regional industry clusters, and leverage other public and private resources intended to accelerate innovation, job creation, and regional economic development.

Innovation is critically important to America's ability to compete in the global economy – strengthening our capacity to create and retain new jobs and sustain our economic recovery. Funding for the Hollings Manufacturing Extension Program, the National Network for Manufacturing Innovation, and the Regional Innovation Program in the FY 2014 CJS Appropriations bill will help federal, state, and local entities leverage existing resources, spur regional collaboration, and support economic renewal and job creation in high-growth industries.

We must use every opportunity to promote the innovation economy at the regional level so that we can remain competitive and create jobs in high growth industries. With so many Americans still looking for work, I respectfully urge this subcommittee to fund these critically important economic initiatives that will help spur job growth now, while providing workers, entrepreneurs, and businesses—particularly smaller enterprises and manufacturers—with the tools they need to compete in the global economy.

Testimony of
Representative John D. Dingell
Committee on Appropriations
Subcommittee on Commerce, Justice, Science, and Related Agencies
“Members of Congress and Outside Witnesses Hearing”

March 21, 2013

Thank you, Chairman Wolf and Ranking Member Fattah, for allowing me to submit testimony in support of the Hollings Manufacturing Extension Partnership (MEP) program at the National Institute of Standards and Technology (NIST). I am deeply grateful for your ongoing support of this country’s manufacturing base and the millions of jobs it supports. I hope your support of MEP will continue as the Committee on Appropriations begins its consideration of funding legislation for the program in fiscal year 2014.

I recognize the budgetary constraints under which the federal and many state governments now function. Money is tight all around, which intensifies – and rightly so – pressures to deliver targeted funding to programs that have demonstrated the ability to generate meaningful results. Likewise, we will seriously jeopardize our country’s first, tentative steps out of recession if we do not make wise investments in job creation. To that end, I can think of few better federal programs more perfectly suited to that cause than MEP.

Consequently, I have come before the Subcommittee this morning to ask for level funding for MEP in fiscal year 2014, as well to encourage my colleagues to consider approving a reduction in the program’s federal cost-share requirement to a level not greater than 50 percent. With respect to MEP’s funding level, I would note that the program has been funded at approximately \$128 million since fiscal year 2010. I very respectfully request that this level of funding – no more, no less – be continued for fiscal year 2014. Since its creation in 1988, MEP has continually delivered a high return on investment to the taxpayer. Every dollar of federal investment in MEP generates nearly \$20 in new sales growth and \$20 in new client investment, which, in total, amounts to \$2.5 billion in new sales annually. Additionally, every \$2,100 of federal investment helps MEP create or retain one manufacturing job.

In order for MEP centers to make maximum use of federal dollars, I believe Congress must consider setting a 50-percent cap on MEP’s federal cost-share. Since 1998, the cost-share ratio has been statutorily set at 66 percent. Thanks to five years of recession, many small and mid-sized manufacturers have delayed investments in capital and business development, making it increasingly difficult for them to afford the client fees necessary for MEP centers to meet the program’s federal cost-share requirement. Moreover, significant fiscal challenges have reduced states’ ability to contribute to MEP, thereby reducing the program’s overall budget. In fact, according to surveys by the American Small Manufacturers Coalition (ASMC), some 25 states have been forced to reduce or eliminate funding for their MEP centers.

With this in mind, I note for the Subcommittee that the Government Accountability Office (GAO) report required by the America COMPETES Act (Pub. L. No. 111-358) does not include any concrete recommendations for changing MEP's cost-share structure. As a result, the Department of Commerce has concluded it lacks the authority to alter that structure, absent a congressional mandate. The House and Senate must take action in the 113th Congress to make a reasonable change in MEP's federal cost-share structure. I would add that a reduction in the federal MEP cost-share requirement would be cost-neutral for the federal government. Including the provision I have just described does not require any additional federal funding, but instead ensures that a higher percentage of operating and outreach funds are directed to MEP centers. These funds are critical in supporting manufacturing needs research, outreach and diagnostics, development and retention of MEP's 1,400 field experts, and dissemination of information to manufacturers.

In closing, Mr. Chairman and Ranking Member Fattah, I urge the Subcommittee to retain level funding for MEP. I also urge my colleagues to consider supporting a 50-percent cap on MEP's federal cost-share requirement. These right-minded actions will guarantee the viability of a program that is an integral part of domestic job creation and accelerating economic growth. Similarly, MEP will help small and mid-sized manufacturers find new markets for their products, thus contributing to the President's goal of doubling American exports. All of these goals are non-partisan, and my humble request to you this morning is to act cooperatively in furtherance of them.

Thank you for your courtesy.

MICHAEL H. MICHAUD
2ND DISTRICT MAINE

WASHINGTON OFFICE
1724 LONGWORTH HOUSE OFFICE BUILDING
WASHINGTON, DC 20515
PHONE: (202) 225-6306
FAX: (202) 225-2943

www.michael.house.gov

Congress of the United States
House of Representatives
Washington, DC 20515

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SUBCOMMITTEE ON WATER RESOURCES AND ENVIRONMENT

Subcommittee on Commerce, Justice, and Science
Written Testimony Submitted for the Record
By Rep. Michael H. Michaud (ME-02)

Funding for the Economic Development Administration for Fiscal Year 2014
March 20, 2013

Dear Chairman Wolf, Ranking Member Fattah and Members of the Subcommittee:

I am submitting written testimony today in support of funding the Economic Development Administration (EDA) at FY 2012 levels. I urge you to fund this program at FY12 levels for the simple reason that the EDA plays a critical role in rural communities that may not otherwise have the resources to pursue public works projects or promote economic growth.

As a fiscal conservative and a Member of the Blue Dog coalition, I am strongly in favor of balancing our budgets and reducing our debt. And as a former paper mill worker from a very small town in Maine, I am staunch advocate for rural economic growth. I know we are going to have to make tough decisions to fund some programs over others. I have no doubt you are receiving testimony from other Members claiming their programs are critical and should be fully funded. I hope the information I provide today distinguishes the EDA from others by demonstrating that the program is a cost-effective investment of taxpayer dollars at a time when every penny must be spent wisely.

FY 2012 levels of funding for EDA is justified because of the return on investment of EDA funds. In 2008, an independent report by Grant Thornton confirmed that EDA investments in rural areas "have a statistically significant impact on employment levels." The study also concluded that "between 2.2 and 5.0 jobs per \$10,000 in incremental EDA funding, at a cost per job of between \$2,001 and \$4,611." On average, every dollar the agency invests leverages another \$6.90 in private and public funds. EDA investments more than pay for themselves.

In addition to its cost-effectiveness, EDA is the only federal agency focused exclusively on job creation, economic growth, and investments to help communities compete in a global economy. Key to this mission is the prioritization of regional collaboration; EDA emphasizes intergovernmental and public/private partnerships. These partnerships and the EDA grants provide the building-blocks for small and rural communities to invest in their infrastructure or resources and plant the seeds of long-term economic growth.

The partnership-driven projects yield results. Since its inception, EDA has created over four million private sector jobs and leveraged roughly \$150 billion in private sector investment. In just the last year, EDA has supported the expansion of internet capacity

BANGOR:
6 STATE STREET, SUITE 101
BANGOR, ME 04401
PHONE: (207) 942-6935
FAX: (207) 942-5907

LEWISTON:
179 LISBON STREET, GROUND FLOOR
LEWISTON, ME 04240
PHONE: (207) 782-3704
FAX: (207) 782-5330

PRESQUE ISLE:
445 MAIN STREET
PRESQUE ISLE, ME 04769
PHONE: (207) 764-1036
FAX: (207) 764-1060



for businesses in Vermont; funded the establishment of an incubator program to assist small businesses and emerging entrepreneurs in the Virgin Islands; invested in the expansion of an Agri-Business Park in New York; rebuilt critical rail infrastructure in Louisiana; and funded a study on the impact of oil and gas development in Eastern Montana, where there has been an enormous expansion of the oil and natural gas sector and job creation. These projects create jobs in the short-term and make it easier for businesses to grow over time.

More importantly, these investments have been made in areas that do not have alternative resources. Integral to the EDA's mission is its focus on economically distressed and underserved communities. The program's funding goes to areas that have suffered significant job losses or are striving to rebuild to become more competitive. In many cases, EDA is the only option for local Economic Development Districts who need resources to complete the projects they have identified as economic drivers for their communities. As a result, EDA fills a unique need and produces unique results.

I respect the tough choices facing this Subcommittee, because there are many important programs that are funded through the Commerce, Justice, Science, and Related Agencies bill. But I hope the information I have provided here today illustrates the singular role the EDA fills for our rural communities, where many economies were declining or underdeveloped even before the Great Recession hit. This program is helping these communities make pragmatic investments to get back on their feet. Funding EDA at FY 2012 levels will support more economic growth in more underserved communities. In short, it will leverage more private investment and create more jobs precisely where we need it most.

Please do not hesitate to contact me if you have any questions or need more information about the value of the EDA.

Thank you for your consideration of this testimony.

Sincerely,



Michael H. Michaud

Congressman Rick Larsen

Written testimony to the House Appropriations Committee on Appropriations, Subcommittee on Commerce, Justice and Science

March 21, 2013

Mr. Chairman and Ranking Member, thank you for the opportunity to testify today.

I ask that in the Fiscal Year 2014 Commerce, Justice and Science Appropriations Bill include funding for two National Oceanographic and Atmospheric Administration programs: \$65 million for the Pacific Coastal Salmon Recovery Fund and \$11.7 million for Monitoring, Evaluation, and Hatchery Reform under the Mitchell Act. I also ask for full funding for Justice Assistance Grants, COPS Grants, and the Regional Information Sharing System in the Department of Justice.

At the beginning of each Congress I write a set of goals to guide my and my office's actions. These goals create a focal point for my office and are a daily reminder of what is important for my District. My number one goal is to invest in the foundation of long-term economic growth that creates jobs and opportunity in the Pacific Northwest.

An important part of that foundation is the health of our fisheries, which support about 60,000 jobs in my state. Another important piece of the foundation is the strength of our international commerce, as 40 percent of all jobs in my state depend on trade. I also know we can only grow and prosper if our communities are safe.

For these reasons I am requesting that in the Commerce, Justice, and Science, and Related Agencies Appropriations Act, fiscal year 2014 you support programs that protect the natural heritage of my state, promote trade, and protect the safety of families.

The Pacific Northwest is home to a variety of important commercial and recreational fisheries, including salmon, groundfish, crab, and rockfish. Both the commercial fishing and outdoor recreation industries account for 60,000 jobs and nearly \$4.5 billion in economic activity in my state alone, according to the Washington Department of Fish and Wildlife. Many of our salmon runs are endangered because of years of overfishing, development, and a lack of management tools. That puts our economy in jeopardy too.

That is why I am asking the Committee to fund the Pacific Coastal Salmon Recovery Fund at \$65 million for Fiscal Year 2014. I appreciate the Committee's support for this program in the past. Your support has resulted in impressive accomplishments. Salmon runs are improving. Tribes, states, local governments, and stakeholders are coordinating their efforts to ensure that they continue to improve. Another critical piece of funding for salmon improvements is the Mitchell Act, which funds hatchery improvements and has been the key to reforms in the hatchery program. The salmon and steelhead produced from these hatcheries are an economic engine for small communities that rely on recreational fishing. In short, hatchery reform brought about through funding for the Mitchell Act has kept people fishing. That's welcome news in for Northwest communities.

In addition to protecting our fisheries, we must also protect the programs in this bill that protect our trade programs. Forty percent of all jobs in Washington state are linked to foreign trade. More than 8,500 Washington state companies exported their products in 2010. Ninety-one percent of those were small and medium-sized enterprises with fewer than 500 employees. When we export our products around the world, we create jobs here at home. I urge this Committee to including full funding for the International Trade Administration (ITA), which seeks to develop the export potential of U.S. firms and improve the trade performance of U.S. industry. I also urge full support for the U.S. Commercial Service, which helps inexperienced firms export their products overseas. The Commercial Service facilitated \$54 billion in U.S. exports in 2011, helping 18,500 companies nationwide, including 317 companies Washington state.

As we work to grow the economy, we must also make sure we are making investments in the safety of our communities. Safe communities allow children and families to thrive and contribute to our society. That is why I ask you to fully fund the Justice Assistance Grants, COPS Grants, and the Regional Information Sharing System.

Law enforcement officials in my District use this funding to keep cops on the street and criminals in check. Commander Pat Slack, of the Snohomish Regional Drug and Gang Task Force, relies on the \$200,000 he gets in JAG funding for nearly half of his Task Force's operations. He told me that further funding cuts could cost Snohomish County the criminal prosecutor who handles all federal prosecutions involving drugs and guns that arise in the county.

The cities of Mount Vernon, Burlington, and Everett in my district have used COPS grants to hire additional officers in the last few years, resulting in five additional police officers protecting communities in Northwest Washington.

The Regional Information Sharing System, which helps law enforcement prevent overlapping operations and keeps officers safe, received a 40 percent funding cut in fiscal year 2012. This valuable system's resources are increasingly stretched, even as demand for its services continues to increase. Everett Police Chief Kathy Atwood, who serves on the board of the Western States Information Network of RISS, says her department relies heavily on the RISSafe database to keep officers safe on the job. Use of RISSafe allows a city police department to find out about a federal undercover agent their operation could endanger, and prevents state and local law enforcement from sending armed agents into the same drug distribution house at the same time. Chief Atwood says that knowing how and when other law enforcement agencies are working nearby is, quote "like the 911 system. It's something we just simply could not do without." Funding cuts have already cost critical RISS personnel including Washington state's Crime Analyst. I urge this committee to fully fund RISS, and consider restoring its fiscal year 2011 funding level of \$45 million.

With that Mr. Chairman and Ranking Member, I appreciate the opportunity to testify today and I encourage the Committee to invest in what I see as the foundation of long-term economic growth that creates jobs and opportunity.

Testimony of Representative Gary C. Peters
Michigan's 14th District

Mr. Chairman, Ranking Member Fattah, and Members of the Subcommittee:

I support full funding for the National Institute of Standards and Technology's Hollings Manufacturing Extension Program (MEP), within the Department of Commerce. In addition, the non-federal cost share ratio for MEP should be reduced from 66% to 50% to standardize the cost share requirement with other similar Department of Commerce programs.

MEP has been a 20 year success, serving small to medium-sized manufacturers. The program helps these manufacturers develop new customers, expand into new markets, and create new products. This helps manufacturers create and retain jobs, increase profits, and save time and money. MEP centers serve the unique needs of small to medium-sized manufacturers, with personalized services which range from assisting family owned businesses with continuity planning to helping manufacturers find multi-skilled technicians to hire. MEP generates \$20 in sales growth and \$20 in new client investment for each dollar of federal investment.

In my home state of Michigan, the Michigan Manufacturing Technology Center is a MEP Center with five regional offices. In fiscal year 2012, the center helped manufacturers create or save over 2,000 jobs and increased and retained sales by over \$175 million. These centers have a real impact on the clients they serve and make a difference in our communities.

Currently, MEP has the highest cost share ratio of any Department of Commerce program and is one of only 24 of the department's 96 financial assistance programs that require cost sharing at all. MEP has a stringent 66% matching requirement, which was originally instituted due to the scheduled funding sunset for MEP but was not adjusted when the sunset clause was eliminated by Congress in 1998.

I support adjusting the MEP cost share structure to allow use of federal funds for 50 percent of the costs incurred by the MEP Center. This would bring the cost share ratio in line with other Department of Commerce programs that require a cost share. MEP Centers will be able to devote more time to providing client services to manufacturers and less time seeking non-federal funding. This adjustment will be cost-neutral to the federal government and the Department of Commerce already has the statutory authority to implement it. This will ensure that more of the operating and outreach funds are directed towards MEP centers, allowing them to continue their important work supporting small manufacturers.

MEP encourages innovation in the American manufacturing industry and serves as an important link between federal research and U.S. manufacturers. I urge the committee's support of this important program, and the adjustment of the cost share ratio to allow these centers to focus on their important core mission.

WRITTEN STATEMENT OF**Laurel G. Bellows, President
AMERICAN BAR ASSOCIATION****to the
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE, AND RELATED
AGENCIES
of the
UNITED STATES HOUSE OF REPRESENTATIVES****on the subject of****The Legal Services Corporation****March 21, 2013**

Chairman Wolf, Ranking Member Fattah, Members of the Subcommittee, thank you for allowing me to submit these remarks today in support of the Legal Services Corporation. I am Laurel G. Bellows, President of the American Bar Association (ABA) and Principal of the Bellows Law Group in Chicago, Illinois. On behalf of the ABA and its nearly 400,000 members, I am submitting this testimony today to urge the Committee to provide \$440 million for the Legal Services Corporation (LSC) for Fiscal Year 2014.

The Legal Services Corporation is the largest provider of civil legal assistance to the poor in the nation. LSC funds grants to 134 programs operating in all fifty states, the District of Columbia, and Puerto Rico. The local programs then offer civil legal assistance to Americans at or below 125 percent of the federal poverty guidelines. LSC grantees assist veterans returning from war, domestic violence victims, individuals undergoing foreclosure or other housing issues, those coping with the after-effects of natural disasters, and families involved in child custody disputes.

LSC was funded at \$420 million in 2010, a sum that has been significantly reduced since then. At the same time, the poverty population in the U.S. has grown significantly. The ABA's \$440 million recommendation is a conservative estimate of the 2010 appropriations number indexed for inflation. The ABA understands that federal funding must be carefully apportioned among many worthwhile programs and that the government has serious budgetary limitations. At the same time, the responsibility for providing justice for Americans is an obligation of government, referenced in the Preamble of the U.S. Constitution. The need for increased funding for LSC is paramount; for justice to prevail, access to justice must be universal.

The total number of Americans in poverty is at levels not seen since the early 1960s. This increase in the number of people eligible for legal aid makes it more important than ever that LSC receive adequate funding. Foreclosure and homelessness rates continue to rise, resulting in increased numbers of people seeking legal help with housing issues. Economic conditions continue to foster reductions in the workforce and a high unemployment rate, producing

increased applications for legal help with either employment-related legal issues or general assistance.

LSC has examined the expressed demand for its services and the capacity of its grantee programs to respond to this demand; due to limited resources, grantees are able to respond to less than half the applications for legal assistance by eligible individuals. LSC-funded programs must turn away one-half the eligible people who seek assistance in resolving legal problems that affect their health, housing, employment or other critical areas of life, problems that keep them mired in poverty. Furthermore, the actual level of need is much larger than the current demand for such services would suggest. Many poor people with life-altering legal problems simply do not seek assistance because they are aware that they have at best a 50-50 chance of getting such help.

At this time when LSC cannot respond to existing demand for services, the number of people in poverty, and needing LSC help, continues to grow. Nearly 61 million Americans qualify for federally funded legal assistance through the Legal Services Corporation. The Census Bureau reports that the poverty rate continues to rise; the poverty population has increased in all fifty states. In my home state of Illinois, the poverty population has increased forty-five percent, with the number of people now eligible for legal aid in the state now almost 2.5 million.

Civil legal aid for the poor is a prime example of constituent services provided in every congressional district in the United States. These services lead to greater efficiencies in other government services. People who are unable to resolve basic civil legal problems are more likely to require assistance from public social services programs. LSC-funded programs prevent a long-term reliance on other government programs, many of which have also suffered funding cuts. For example, Mr. Chairman, in your home state of Virginia, the Legal Services Corporation of Virginia commissioned a study in 2011 determining that the state's legal aid programs produced over \$139 million in benefits to Virginia residents in Fiscal Year 2010 alone, and that every dollar invested in Virginia legal aid produced a return of \$5.27.

LSC-funded programs help low-income Americans who qualify for and need legal assistance. The most frequent cases involve family law issues; more than a third of all cases closed by local LSC grantees deal with some type of family law matter. LSC grantees assist victims of domestic violence with protective and restraining orders, help parents obtain and retain custody of their children, assist family members in acquiring guardianship for children without parents, and provide other family law legal counseling.

LSC grantees also assist returning military veterans and their families. Veterans who served in combat zones often face serious legal problems upon returning to civilian life. Issues such as child custody, employment, and homelessness commonly arise. An unusually large number of people have served our nation in the prolonged military conflicts over the past 10 years, and have often returned to confront serious legal issues. Over 1.6 million U.S. troops have served in Iraq and Afghanistan since 2001. As these servicemembers continue to transition at high numbers from active-duty to veteran status, they encounter a bleak job market and an array of civil legal issues incidental to their service in the areas of employment, consumer, and family law, among others. Recovering Veterans Administration benefits for service-connected injuries is especially

challenging; these cases are complicated and frustrating and may drag on for years before results are achieved.

Another area where LSC programs provide assistance is disaster relief. When natural or national disasters occur, LSC grantees assist with many different issues, including identity verification, housing matters, and family law issues. September 11th families, flood victims, and hurricane evacuees are all examples of those who have received assistance from LSC-funded programs. Natural disasters have occurred with surprising frequency, throwing thousands into poverty and creating legal problems of unprecedented scope. Each disaster places new, unplanned burdens on already-overextended legal aid programs.

Housing and foreclosure cases also account for over 25% of legal aid cases. The many different issues addressed include resolution of landlord-tenant disputes, prevention of foreclosure, renegotiation of home loans and mortgages, and assistance to renters whose landlords are being foreclosed on, among others.

Robust funding for LSC is desperately needed because other funding sources have diminished due to the country's economic downturn; pro bono efforts, while critical, are insufficient to completely replace federal legal aid funding. Federal funding available through LSC provides the foundation for the nation's civil legal aid delivery system, and LSC funding catalyzes the development of other, additional, funding sources. Most states now provide government funding for legal aid programs; however, as a result of the recession, state appropriations and legislatively approved court fees and fines supporting legal aid declined in 2011 for the first time since the ABA began tracking these funding sources in the late 1990s. Revenue from Interest on Lawyers' Trust Accounts (IOLTAs) has also decreased sharply in the past five years due to continued historically low interest rates; since 2007, IOLTA income has decreased 74 percent nationwide.

With respect to pro bono, LSC funding provides an important framework for pro bono efforts, and reducing funding for LSC could not only harm the LSC programs themselves, but also diminish pro bono efforts due to lack of necessary infrastructure. The ABA, and the organized bar as a whole, will continue vigorous efforts to stimulate an even greater outpouring of generosity by private lawyers in donating service to address the legal needs of the poor. However, private bar pro bono efforts cannot replace government support for civil legal services and are in fact dependent on governmental support. LSC constitutes the foundation and essential catalyst for the national pro bono network. LSC grantees devote 12.5% of their funding to private attorney involvement, with most of that funding going to support pro bono programs. For pro bono to thrive and increase, the financial resources that the LSC provides to support the infrastructure for pro bono delivery systems must not be reduced. Any reduction in funding for the LSC will impede efforts to expand pro bono contributions.

The American Bar Association has supported the effort to provide legal services to the poor since the establishment of the Standing Committee on Legal Aid and Indigent Defendants (SCLAID) in 1920. Supreme Court Justice Lewis F. Powell, while serving as ABA President in 1964, called for a major expansion of the nation's legal services for the poor, and the ABA worked closely with many others to achieve this goal, resulting in the creation of the Legal

Services Corporation in 1974. We have consistently advocated for funding for this vital institution. No matter what number Congress chooses, the need for legal aid will likely continue to far exceed the available resources. Therefore, we encourage the Committee, while still considering the fiscal and budgetary issues the country faces, to fund LSC at \$440 million to address the growing need for civil legal assistance for low-income Americans.



Testimony of the
American Geophysical Union
 Prepared by Elizabeth Landau, Public Affairs Manager

Regarding the
National Aeronautics and Space Administration
National Oceanic and Atmospheric Administration
National Science Foundation

FY 2014 Budget Request

To the
 U.S. House Committee on Appropriations
 Subcommittee on Commerce, Justice, Science
 21 March 2013

The American Geophysical Union (AGU), a non-profit, non-partisan scientific society, appreciates the opportunity to submit testimony regarding the Fiscal Year 2014 budget request for the National Aeronautics and Space Administration (NASA), the National Oceanic and Atmospheric Administration (NOAA), and the National Science Foundation (NSF). **The AGU, on behalf of its over 62,000 Earth and space scientist members, would like to respectfully requests that Congress appropriates at least FY12 enacted levels of \$1,761 billion for Earth Science at NASA, \$580.59 billion overall for NOAA, and \$7.033 billion overall for NSF.**

NATIONAL SCIENCE FOUNDATION

AGU supports an overall budget of at least \$7.033 billion for NSF. AGU greatly appreciates Congress's support for science and technology in past appropriations and through the America COMPETES Reauthorization Act of 2010. Investments in NSF provide for America's future in a responsible manner. These investments pay out vitally important dividends in future development that drives economic growth, especially in critical areas of sustainable and economic natural resources and reduced risks from natural hazards. Support for science will maintain our economic and industrial leadership in the global marketplace, ensure economic progress, grow jobs, and uphold society's advancement.

Geosciences Directorate

AGU requests \$885.27 million for the Geosciences Directorate (GEO), the principal source of federal support for academic Earth scientists and their students who are seeking to understand the processes that sustain and transform life on this planet. Approximately 63 percent of support for university-based geosciences research comes from this directorate and more than 14,000 people will be directly supported through GEO in FY14 with thousands of others deriving support indirectly.

Much of the geosciences research budget leads to a better understanding of critical national needs, such as water and mineral resources, energy resources, environmental issues, climate change, and mitigation of natural hazards. AGU asks the Subcommittee to strongly support



these programs.

GEO supports infrastructure, operation, and maintenance costs for cutting edge facilities that are essential for basic and applied research. Geoscience-based research tools and academic expertise helped to end the BP Deepwater Horizon oil spill, saving billions of dollars for industry and untold costs to the environment. Among the major facilities that NSF supports, the Academic Research Fleet, EarthScope Operations, Incorporated Research Institutions for Seismology (IRIS), Ocean Drilling Activities, the Ocean Observatories Initiative, and the National Center for Atmospheric Research are all key to our nation's innovation and economic well-being. AGU strongly supports robust and steady funding for this infrastructure as well as operation and maintenance of these major facilities.

Earth Science Education

The geosciences workforce is aging and being quickly depleted. Congress can grow this workforce, stimulate economic growth in the energy, natural resources and environmental sectors, and improve natural resource literacy by supporting the full integration of Earth science information into mainstream science education at the K-12 and higher education levels. AGU strongly supports the Math and Science Partnerships (MSP), the Graduate Research Fellowships (GRF) and the Research Experiences for Undergraduates (REU) within NSF's Education and Human Resources Division. These programs are effective in building a science and engineering workforce for the twenty first century. Improving geoscience education, one of the goals of NSF-EHR, to levels of recognition similar to other scientific disciplines is critical.

NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION

Joint Polar Satellite System (JPSS)

AGU supports fully funding JPSS in FY14. Because the FY11 funds that were necessary to launch JPSS on time were not appropriated, there will be a data gap beginning in 2017. It is critical that Congress sufficient funds for JPSS in FY14 in order to minimize the length of that gap.

Polar satellites provide the only weather and climate information for large portions of the planet and are particularly important for a whole host of end users. For military planners, overseas U.S. military operations will be greatly affected by the data gap. JPSS will provide critical information for long-term forecasts, which are imperative for troop deployments and planning operations. Additionally, weather forecasts for oil and gas companies doing work in Alaska, as well as cargo and cruise ships carrying billions of dollars-worth of goods and millions of passengers, will be compromised. Furthermore, our ability to forecast weather in Alaska will be severely compromised. Others impacted by a data gap include the aviation industry, as JPSS will observe volcanic eruptions and track the movement of ash clouds; agriculture, as farmers rely on polar satellites for drought, extreme temperature, and length of growing season information; the fishing industry, as fishermen check sea-surface data from polar satellites to find fish stocks before heading out for their daily catch; and finally weather forecasting, as forecasters' ability to accurately project the intensity and trajectory of severe weather events, such as hurricanes, will be greatly diminished.



National Weather Service (NWS)

AGU hopes the Subcommittee will continue to support NWS and will fund it at the FY12 enacted level of \$972 million in FY14. NWS is critical to protecting American lives, property, and commerce. Weather observations provide information that is vital for weather modeling and functions like accurate tornado watches and warnings and storm forecasting must be preserved. Furthermore, buoy and surface weather observations are the backbone of most of the weather warning systems. Because at least one-third of U.S. GDP is concentrated in weather-sensitive industries, it is critical that Congress maintains the United States' robust weather forecasting infrastructure.

NATIONAL AERONAUTICS & SPACE ADMINISTRATION

Earth Science

AGU supports the vital Earth observing programs within NASA. AGU supports the FY12 enacted level of \$1.761 billion for Earth Science programs within the Science Mission Directorate at NASA. The investments are needed to implement the priorities of the National Academies *Earth Science and Applications from Space* Decadal Survey. NASA needs to maintain its current fleet of Earth-observing satellites, launch the next tier, and accelerate development of the subsequent tier of missions. The observations and understanding about our dynamic Earth gained from these missions is critical and needed as soon as possible. Earth observations are used every day, not just for research, but for critical information to aid society in routine tasks, such as weather forecasting, emergency services, and tracking volcanic ash plumes or oil spills that disrupt the economy and the environment.

Planetary Science

AGU supports the FY12 enacted levels of \$1.501 billion for the Planetary Science programs within the Science Mission Directorate at NASA. Planetary science examines the origin, content, and evolution of the solar system and the potential for life elsewhere. There are more practical applications for planetary sciences as well. The science data from many planetary missions provides scientists with critical information for future human spaceflight missions, which furthers NASA's exploration agenda. Additionally, Robotic Mars orbiters are mapping natural resources such as water and minerals on Mars.

AGU appreciates this opportunity to provide testimony to the Subcommittee and would be pleased to answer any questions or to provide additional information for the record. We thank you for your thoughtful consideration of our request. For additional information, please contact Elizabeth Landau at the American Geophysical Union, 202-777-7535 or elandau@agu.org.

**AGI Fiscal Year 2014 Testimony to the House Commerce, Justice, Science, and
Related Agencies Appropriations Subcommittee**

Testimony Submitted by Wilson Bonner, Policy Associate, and Maeve Boland, Director,
Geoscience Policy

American Geosciences Institute

in support of Fiscal Year 2014 Appropriations for the
National Science Foundation, National Oceanic and Atmospheric Administration, National
Institute of Standards and Technology, and the National Aeronautics and Space Administration

U.S. House of Representatives

Subcommittee on Commerce, Justice, Science, and Related Agencies Appropriations
March 21, 2013

To the Chairman and Members of the Subcommittee:

The American Geosciences Institute (AGI) supports Earth science research sustained by the National Science Foundation (NSF), the National Oceanic and Atmospheric Administration (NOAA), the National Institute of Standards and Technology (NIST), and the National Aeronautics and Space Administration (NASA). Frontier research on the Earth, energy, and the environment has fueled economic growth, mitigated losses, and sustained our quality of life. The Subcommittee's leadership in supporting geoscience-based research is even more critical as our nation competes with rapidly developing countries, such as China and India, for energy, mineral, air, and water resources. Our nation needs skilled geoscientists to help explore, assess, and develop Earth's resources in a strategic, sustainable, and environmentally sound manner and to help understand, evaluate, and reduce our risks to hazards. **AGI supports maintaining the FY 2012 funding levels of \$7.033 billion for NSF, \$751 million for NIST, and \$1.76 billion for Earth Science at NASA, plus \$4.9 billion for NOAA.**

AGI is a nonprofit federation of 49 geoscientific and professional societies representing more than 250,000 geologists, geophysicists, and other Earth scientists. Founded in 1948, AGI provides information services to geoscientists, serves as a voice for shared interests in our profession, plays a major role in strengthening geoscience education, and strives to increase public awareness of the vital role the geosciences play in society's use of resources, resilience to hazards, and the health of the environment.

NSF: AGI supports an overall budget of \$7.033 billion for NSF. The forward-looking investments in NSF are fiscally responsible and will pay important dividends in future development that drives economic growth, especially in critical areas of sustainable and economic natural resources and reduced risks from natural hazards. Support for science will save jobs, create new jobs, support students, and provide training for a twenty-first century workforce.

NSF Geosciences Directorate: The Geosciences Directorate (GEO) is the principal source of federal support for academic Earth scientists and their students who are seeking to understand the processes that sustain and transform life on this planet. About 55 percent of support for university-based geosciences research comes from this directorate.

AGI asks the Subcommittee to maintain FY 2012 funding levels of \$259 million for Atmospheric and Geospace Sciences, \$184 million for Earth Sciences, \$352 million for Ocean Sciences, and \$91 million for Integrative and Collaborative Education and Research (ICER) within GEO. Much of NSF's geosciences research budget supports investigations that are critical for current national needs, such as water and mineral resources, energy resources, environmental issues, climate change, and mitigation of natural hazards.

NSF's Office of Polar Programs (OPP) funds basic research in the Arctic and Antarctica that helps the United States maintain strategic plans, international efforts, security goals, natural resource assessments, cutting-edge polar technology developments, and environmental stewardship of extreme environs. OPP's funding helps support researchers and students, the U.S. military, and the private sector. OPP is estimated to directly support more than 3,000 people in FY 2014 and thousands of others indirectly. AGI supports continued funding at FY 2012 levels of \$436 million for this important program.

GEO supports infrastructure and operation and maintenance costs for cutting edge facilities that are essential for basic and applied research. Ultimately, the observations and data provide knowledge that is used by researchers and professionals in both the public and private sectors. GEO research and infrastructure helps drive economic growth in a sustainable manner. Geoscience-based research tools and academic expertise helped to end the BP Deepwater Horizon oil spill, saving billions of dollars for industry and untold costs to the environment.

AGI strongly supports robust and steady funding for infrastructure and operation and maintenance of these major facilities, including the Academic Research Fleet, EarthScope Operations, Incorporated Research Institutions for Seismology (IRIS), Ocean Drilling Activities, the Ocean Observatories Initiative, and the National Center for Atmospheric Research (NCAR).

NSF Support for Earth Science Education: Congress can grow the depleted geosciences workforce; stimulate economic growth in the energy, natural resources and environmental sectors; and improve natural resource literacy by supporting the full integration of Earth science information into mainstream science education at the K-12 and higher education levels. AGI strongly supports the Math and Science Partnerships (MSP), the Graduate Research Fellowship Program (GRFP), and the Research Experiences for Undergraduates (REU) within NSF's Education and Human Resources (EHR) Division. These programs are effective in building a science and engineering workforce for the twenty first century.

Improving geoscience education, one of the goals of NSF-EHR, to levels of recognition similar to other scientific disciplines is important in the following ways:

- Geoscience offers students subject matter that has direct application to their lives and the world around them, including energy, minerals, water, and environmental stewardship.
All students should be required to take a geoscience course in primary and secondary school.
- Geoscience exposes students to a range of interrelated scientific disciplines. It is an excellent vehicle for integrating the theories and methods of chemistry, physics, biology,

and mathematics. A robust geoscience course would make an excellent capstone for applying lessons learned from earlier class work.

- Geoscience awareness is a key element in reducing the impact of natural hazards on citizens – hazards that include earthquakes, volcanic eruptions, hurricanes, tornadoes, and floods. Informal geoscience education that leads to reducing risks and preparing for natural events should be a life-long goal.
- Geoscience provides the foundation for tomorrow's leaders in research, education, utilization, and policy making for Earth's resources and our nation's strategic, economic, sustainable, and environmentally sound natural resources development. There are not enough U.S.-trained geoscientists to meet current demand and the gap is growing, as shown in the recent National Academies report, *Emerging Workforce Trends in the U.S. Energy and Mining Industries: A Call to Action*. Support for geoscience research and education is necessary to stay competitive and to wisely manage our natural resources.

NOAA: AGI supports a budget of \$4.9 billion for NOAA, which is consistent with FY 2012 levels. We hope the Subcommittee will continue to support the National Weather Service (NWS), Oceanic and Atmospheric Research (OAR), National Ocean Service (NOS), and the National Environment Satellite, Data and Information Service (NESDIS). These programs are critical for understanding and mitigating natural and human-induced hazards in the Earth system while sustaining our natural resources. These programs prevent billions of dollars of losses, keep the private and public sectors growing, and save lives. For example, drought forecasts are worth up to \$8 billion to the farming, transportation, tourism, and energy sectors while NexRad radar has prevented more than 330 fatalities and 7,800 injuries from tornadoes since the early 1990s.

NIST: We support maintaining funding of \$751 million for NIST in fiscal year 2014, in line with FY 2012 enacted levels. Basic research at NIST is conducted by Earth scientists and geotechnical engineers and used by the public and private sectors on a daily basis. The research conducted and the information gained is essential for understanding natural hazards and for identifying the infrastructure needed to build resilient communities and stimulate economic growth. Advanced infrastructure research will help to reduce the estimated average of \$52 billion in annual losses caused by floods, fires, and earthquakes.

NIST is the lead agency for the National Earthquake Hazard Reduction Program (NEHRP), but has received only a small portion of authorized and essential funding in the past. AGI strongly supports the reauthorization of the National Earthquake Hazards Reduction Program (NEHRP) in this Congress. We hope the appropriations subcommittee will continue to support this effective and cohesive program, even if the authorizing legislation takes more time to complete. NEHRP is an excellent example of how to coordinate different entities for the safety and security of all. NEHRP develops effective practices and policies for earthquake loss reduction and accelerates their implementation; improves techniques for reducing earthquake vulnerabilities of facilities and systems; improves earthquake hazards identification and risk assessment methods and their use; and improves the understanding of earthquakes and their effects.

NASA: AGI supports the vital Earth observing programs within NASA. **AGI supports funding of \$1.76 billion for Earth Science programs within the Science Mission Directorate at NASA.** The investments are needed to implement the priorities of the National Academies *Earth Science and Applications from Space* Decadal Survey. NASA needs to maintain its current fleet of Earth-observing satellites, launch the next tier and accelerate development of the subsequent tier of missions. The observations and understanding about our dynamic Earth gained from these missions is critical and needed as soon as possible. Earth observations are used every day, not just for research, but for critical information to aid society in mundane tasks, like weather forecasting and emergency services, such as tracking volcanic ash plumes or oil spills that disrupt the economy and the environment.

We appreciate this opportunity to provide testimony to the Subcommittee and would be pleased to answer any questions or to provide additional information for the record. Maeve Boland can be reached at (703) 379 2480 ext. 228 (voice), (703) 379 7563 (fax), mboland@agiweb.org, or 4220 King Street, Alexandria VA 22302-1502.

**STATEMENT
OF THE
AMERICAN INDIAN HIGHER EDUCATION CONSORTIUM
TO THE U.S. HOUSE OF REPRESENTATIVES - COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES**

March 21, 2013

This statement focuses on the National Science Foundation (NSF) and NASA

On behalf of this nation's 37 Tribal Colleges and Universities (TCUs), which compose the American Indian Higher Education Consortium (AIHEC), thank you for the opportunity to express our views and recommendations regarding the National Science Foundation's Tribal Colleges and Universities Program (NSF-TCUP) and NASA (NASA-TCUP) for Fiscal Year 2014 (FY 2014).

SUMMARY OF REQUESTS

National Science Foundation (NSF) - Education and Human Resources Directorate (EHR): Since Fiscal Year 2001, a TCU initiative has been funded and administered under the NSF-EHR. This competitive grants program enables TCUs to enhance the quality of their science, technology, engineering, and mathematics (STEM) instructional, research and outreach programs. TCUs that have been awarded an NSF-TCUP grant have completed comprehensive institutional needs analysis and developed a plan for how to address both their institutional and NSF goals, with a primary institutional goal being significant and sustainable expansion and improvements to STEM programs. Through NSF-TCUP, tribal colleges have been able to establish and maintain programs that represent a key component of the pipeline for the American Indian STEM workforce. ***We urge the Subcommittee to fund the NSF-TCU competitive grants program at a minimum of \$13,350,000.***

National Aeronautics and Space Administration (NASA) – NASA Headquarters, Office of Education - Minority University Research and Education Programs: The NASA-Tribal Colleges and Universities Programs (NASA-TCUP) offers competitive grants to enhance the range of education and research opportunities in STEM at the nation's 37 TCUs. Programs and activities funded under this vital program help to address the science education and research needs of TCUs and help in building the Native (and national) STEM workforce, and enhance the economic development of the communities they serve. ***We strongly urge the Subcommittee to fund the NASA-TCU grants program at the FY 2010 level.***

TCU SHOESTRING BUDGETS: "DOING SO MUCH WITH SO LITTLE"

Tribal Colleges and Universities (TCUs) are an essential component of American Indian/Alaska Native (AI/AN) education. The 37 TCUs operate more than 75 campuses and sites in 15 states, within whose geographic boundaries 80 percent of American Indian reservations and federal Indian trust land lie. They serve students from well over 250 federally recognized tribes, more than 75 percent of whom are eligible to receive federal financial aid. In total, the TCUs annually serve about 88,000 AIs/ANs through a wide variety of academic and community-based programs. TCUs are accredited by independent, regional accreditation agencies and like all U.S. institutions of higher education must undergo stringent performance reviews on a periodic basis to retain their accreditation status. TCUs fulfill additional roles within their respective reservation communities functioning as community centers, libraries, tribal archives, career and business centers, economic development centers, public meeting places, and child and elder care centers. Each

TCU is committed to improving the lives of its students through higher education and to moving American Indians toward self-sufficiency.

TCUs have advanced AI/AN higher education significantly since we first began four decades ago, but many challenges remain. Tribal Colleges and Universities are perennially underfunded. In fact, TCUs are the most poorly funded institutions of higher education in the country.

The tribal governments that have chartered TCUs are not among the handful of wealthy gaming tribes located near major urban areas. Rather, they are some of the poorest governments in the nation. Tribal Colleges are home to some of the poorest counties in America.

The federal government, despite its direct trust responsibility and treaty obligations, has never fully funded the principal institutional operating budgets, authorized under the Tribally Controlled Colleges and Universities Assistance Act of 1978. Currently, the Administration requests and Congress appropriates over \$200 million annually towards the institutional operations of Howard University (exclusive of its medical school), *the only other MSI that receives operating funds from the federal government*. Howard University's current federal operating support exceeds \$19,000/student. In contrast, most TCUs are receiving \$5,665 per Indian Student (ISC) under the Tribal College Act, about 70 percent of the authorized level. TCUs have proven that they need and deserve an investment equal to -- at the very least -- the congressionally authorized level of \$8,000/ Indian student, which is only 42 percent of the federal share now appropriated for operating Howard University. Please understand that we are by no means suggesting that Howard University does not need or deserve the funding it receives, only that the TCUs also need and deserve adequate institutional operations funding; however, their operating budgets remain grossly underfunded.

While TCUs do seek funding from their respective state legislatures for the non-Indian state-resident students (sometimes referred to as "non-beneficiary" students) that account for 17 percent of their enrollments, successes have been at best inconsistent. TCUs are accredited by the same regional agencies that accredit mainstream institutions, yet they have to continually advocate for basic operating support for their non-Indian state students within their respective state legislatures. If these non-beneficiary students attended any other public institution in the state, the state would provide that institution with ongoing funding toward its operations.

TCUs effectively blend traditional teachings with conventional postsecondary curricula. They have developed innovative ways to address the needs of tribal populations and are overcoming long-standing barriers to success in higher education for American Indians. Since the first TCU was established on the Navajo Nation in 1968, these vital institutions have come to represent the most significant development in the history of Tribal higher education, providing access to, and promoting achievement among, students who might otherwise never have known postsecondary education success.

JUSTIFICATIONS:

- **National Science Foundation/Tribal Colleges and Universities Program (NSF-TCUP) in the Education and Human Resources Directorate:** American Indian students have the highest high school drop-out rates in the country. On average, more than 75 percent of all TCU students must take at least one developmental course, most often precollege mathematics. Of these students, our data indicate that many do not successfully complete the course in one year. Without question, a large proportion of the TCUs' already limited resources is dedicated to addressing the continual failings of K-

12 education systems.

To help rectify this, TCUs have developed strong partnerships with their K-12 feeder schools and are actively working, in large part through support from NSF-TCU grant programs, to engage young students in community and culturally relevant science and math education and outreach programs. These efforts include weekend academies and summer STEM camps that reinforce and supplement the instructional programs area K-12s are able to provide.

Beginning in Fiscal Year 2001, NSF-TCUP has provided essential capacity building assistance and resources to TCUs. In the years since the program began, NSF-TCUP has become the primary federal program for building STEM capacity at the TCUs. NSF-TCUP has served as a catalyst for capacity building and positive change at TCUs and the program can be credited with many success stories. Today, American Indians and Alaska Natives are more aware of the importance of STEM to their long-term survival, particularly in areas such as renewable energy and technology-driven economic development.

The NSF-TCU program, administered by the Education and Human Resources Directorate, is a competitive grants program that enables TCUs to develop and expand critically needed science and math education and research programs relevant to their respective communities. Through this program, TCUs that have been awarded an NSF-TCUP grant have been able to enhance their STEM instructional offerings, workforce development, research, and outreach programs.

For example, College of Menominee Nation (CMN) in Keshena, WI has established strong programs in Pre-engineering, Computer Science, Natural Resources, the Biological and Physical Sciences, and Sustainable Development, primarily through support from NSF-TCUP. CMN's Sustainable Development Institute now hosts regional and sometimes international conferences on sustainable practices and in 2011 hosted an important conference for tribes located in the Great Lakes region to review current research on, and discuss strategies for responding to emerging challenges attributed to climate change. CMN is an example of how TCUs are using their STEM programs as a springboard for taking critical leadership roles within their communities. Additionally, faculty and students at Haskell Indian Nations University in Lawrence, KS are using the university's Sequoyah Computer and GIS Lab to support their work with the Omaha and Winnebago Tribal Nations in collecting and analyzing hydrologic and botanical data necessary to support resource management decision-making by the tribal leadership.

Unfortunately, not all of the TCUs have had an opportunity to benefit from this program; yet, funding for this vital program has been static, and the percentage of proposals funded has declined each year beginning in 2004. *We strongly urge the Subcommittee to fund the NSF-TCU grants program at a minimum of \$13,350,000.*

National Aeronautics and Space Administration (NASA) –Tribal Colleges and Universities Program (NASA-TCUP) in the NASA Headquarters, Office of Education - Minority University Research and Education Programs: Since 2010, Navajo Technical College (NTC) in Crownpoint, NM, has conducted an extremely successful program initiated through and funded under a three year NASA-TCUP grant to the American Indian Higher Education Consortium (AIHEC) entitled: AIHEC LUNAR-e: Launching Undergraduate Native Americans in Research, Education, and Employment. NTC through a partnership with NASA's Marshall Space Flight Center in Huntsville, AL not only offers students unparalleled real world science research experience at NASA Centers but has created a model for fostering long-term relationships between TCUs and NASA Centers. NTC has developed an innovative degree program in

AIHEC/Tribal College and Universities FY 2014 CJSci-NSF Appropriations Statement

digital technology building upon this initial grant, which is providing an incubator for developing new American Indian-owned digital technology businesses, which in turn will foster economic development of Tribal communities. NASA-TCUP must continue this important work with the nation's TCUs. *We strongly urge the Subcommittee to fund the NASA-TCU grants program at the FY 2010 level.*

CONCLUSION

Tribal Colleges and Universities provide access to quality higher education opportunities, including STEM focused programs, for thousands of American Indians. The modest federal investment that has been made in TCUs has paid great dividends in terms of employment, education, and economic development. Continuation of this investment represents one of the most cost-effective strategy for enabling Tribal (and national) STEM-based economic development, and makes sound moral and fiscal sense.

We greatly appreciate your past and continued support of the nation's Tribal Colleges and Universities and your serious consideration of our FY 2014 appropriation request.

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**Testimony in Support of FY 2014 Funding for the
National Science Foundation**

March 21, 2013

Submitted by:

Larry Page, Ph.D.

President

Natural Science Collections Alliance

1444 I Street, NW, Suite 200

Washington, DC 20005

Phone: 202-628-1500

Fax: 202-628-1509

Submitted to:

House of Representatives Committee on Appropriations

Subcommittee on Commerce, Justice, Science and Related Agencies

The Natural Science Collections Alliance appreciates the opportunity to provide testimony in support of fiscal year (FY) 2014 appropriations for the National Science Foundation (NSF).

The Natural Science Collections Alliance is a non-profit association that supports natural science collections, their human resources, the institutions that house them, and their research activities for the benefit of science and society. Our membership consists of institutions which are part of an international community of museums, botanical gardens, herbaria, universities, and other institutions that contain natural science collections and use them in research, exhibitions, academic and informal science education, and outreach activities.

The Role of NSF in Scientific Excellence

Federal support for science is an investment in our nation's future. The NSF supports research that creates new knowledge and helps to drive innovation and economic growth. NSF-supported research has led to improvements in human health, food and national security, energy, and natural resource management.

NSF also trains the next generation of researchers and science educators. The agency supports graduate student research training programs that help maintain our nation's global competitiveness. Moreover, K-12 education initiatives ensure a pipeline of scientifically skilled workers for tomorrow's jobs.

America's continued excellence in science and technology depends on sustained investments in research and science education. The progress of basic scientific research requires a steady federal investment. Unpredictable swings in federal funding can disrupt research programs, create uncertainty in the research community, and impede the development of solutions to the nation's most pressing problems.

Biological Research at NSF

NSF's Biological Sciences Directorate (BIO) is the primary federal funding source for basic biological research. BIO serves a vital role in ensuring our nation's continued leadership in the biological sciences by providing about 62 percent of federal grant support for fundamental biological research conducted at our nation's universities and other nonprofit research centers, including natural history museums.

BIO's support of transformative research has advanced our understanding of complex living systems and is leading the way forward in addressing major challenges, such as understanding how biological species diversity helps to regulate environmental systems, identifying novel and cost-effective methods for combating invasive species, and developing new bio-inspired technologies.

Equally important, BIO provides essential support for our nation's biological research infrastructure, such as natural science collections and natural history museums. These research centers enable scientists to study the basic data of life, conduct modern biological and environmental research, and provide undergraduate and graduate students with hands-on training opportunities.

Support for Scientific Collections

Scientific collections play a central role in many fields of biological research, including disease ecology and biodiversity science. Our member institutions also provide critical information about existing gaps in our knowledge of life on Earth. Indeed, the federal Interagency Working Group on Scientific Collections recognized this value in their 2009 report, which found that "scientific collections are essential to supporting agency missions and are thus vital to supporting the global research enterprise."

We strongly encourage Congress to sustain NSF's support for the digitization of high priority U.S. specimen collections. NSF's investment in digitization would enable the scientific community to ensure access to and appropriate curation of irreplaceable biological specimens and associated data, and will stimulate the development of new computer hardware and software, digitization technologies, and database management tools. This effort is bringing together biologists, computer science specialists, and engineers in multi-disciplinary teams to develop innovative imaging, robotics, and data storage and retrieval methods. These tools will expedite the digitization of collections and contribute to the development of new products or services of value to other industries.

NSF has supported efforts by the biological collections community to make biocollections and their associated data more accessible. A series of workshops of biocollection experts has resulted in a community-wide initiative to develop a Network Integrated Biocollections Alliance (NIBA). The NIBA is envisioned as a coordinated, large-scale effort to digitize the nation's biological collections. Federal support is necessary if this goal is to be achieved. For example, the effort will require new initiatives that will support advanced engineering of biocollections

cyberinfrastructure, enhanced training for collections staff, and infusing specimen-based learning into education, among other recommendations.

Other NSF Programs

The Dimensions of Biodiversity program supports cross-disciplinary research to describe and understand the scope and role of life on Earth. Despite centuries of discovery, most of our planet's biological species diversity remains unknown. This lack of knowledge is particularly troubling given the rapid and permanent loss of global biological diversity. Better understanding of life on Earth will help us protect valuable ecosystem services and make new bio-based discoveries in the realms of food, fiber, fuel, pharmaceuticals, and bio-inspired innovation.

The Directorate for Geosciences (GEO) also supports research and student training opportunities in natural history collections. GEO supports cross-disciplinary research on the interactions between Earth's living and non-living systems – research that has important implications for our understanding of water and natural resource management, climate change, and biodiversity.

Within the Directorate for Education and Human Resources, the Advancing Informal STEM Learning program is furthering our understanding of informal science, technology, engineering, and mathematics (STEM) education. This program, formerly called the Informal Science Education program, supports projects that create tools and resources for STEM educators working outside traditional classrooms, such as at museums, botanic gardens, and zoos.

Conclusion

Continued investments in the NSF programs that support natural science collections research and education are essential if we are to maintain the United States' global leadership in innovation. Sustained investments in NSF will help spur economic growth and new discoveries and continue to build scientific capacity at a time when our nation is at risk of being outpaced by our global competitors.

Thank you for your thoughtful consideration of this request and for your prior support of the National Science Foundation.

**Written Testimony of
David Vogan, Ph.D.
President, American Mathematical Society
Professor of Mathematics, MIT
On
FY 2014 Appropriations for the National Science Foundation
For
The House Committee on Appropriations
Subcommittee on Commerce, Justice, Science, and Related Agencies
Congressman Frank R. Wolf, Chair
Congressman Chaka Fattah, Ranking Member**

Chairman Wolf, Ranking Member Fattah, and members of the committee: I am David Vogan, President of the American Mathematical Society (AMS) and Professor of Mathematics at Massachusetts Institute of Technology. The AMS is a professional organization of about 30,000 mathematicians. On behalf of the AMS, I ask the Committee to consider a FY 2014 budget of at least \$7.333 billion for the National Science Foundation (NSF), the NSF FY 2013 budget level passed by the House in May 2012.

What has NSF done for the country lately? One example is “public key cryptography,” which protects your bank account every time you use an ATM. The mathematical ideas involved begin with the German mathematician Carl Friedrich Gauss in the eighteenth century. The cryptographic applications were first made by Ron Rivest, Adi Shamir, and Leonard Adleman at MIT in the 1970s, working with support from the National Science Foundation (as well as the Office of Naval Research).

Medical CT scanners are built using mathematics done in 1917 by the Austrian mathematician Johann Radon. His ideas were made into a crude imaging machine in 1963 by the physicist Allan Cormack at Tufts University in Medford, supported by funding from the Atomic Energy Commission. In 1971, the English industrial engineer Godfrey Hounsfield designed the first machine that could produce the “slice”

medical images with which we are all now familiar. Advances in medical imaging technology since that time have been informed constantly by mathematical work descended from what Radon did almost a hundred years ago. At MIT I have had the privilege for almost forty years of watching the work of Sigurdur Helgason on those ideas; his research was supported for decades by the NSF.

There are similar stories to tell about the mathematics behind the Google search engine, commercial aircraft design, and Pixar movies; about the epidemiology of HIV and the statistics of medical research trials. I can't tell you which NSF grants today are going to be behind those stories in the coming years, but I can say for certain that some of them are.

Instead of telling more of those big stories, I want to conclude by saying a little bit about what it's been like to work at MIT for forty years, in a world supported strongly and consistently by NSF. My graduate education was funded by NSF. I was taught by scientists and mathematicians whose research was funded by NSF. The ways of thinking needed for that research informed their graduate classes and their freshman classes. "Teacher" and "researcher" weren't separate for them. Like breathing and eating, they were just two aspects of their identities, and neither one could ever be suspended. Those whose ideas never won prizes, or founded companies, still inspired students year after year. Some of those *students* won prizes, and founded companies.

Now I'm the one talking to the graduate students and the freshmen, trying to pass along some part of the love for understanding that I received from those teacher-researchers. My work is what NSF supports.

NSF accounts for 65 percent of federal support for academic research in the mathematical sciences and it is the only agency that supports mathematics research broadly across all fields.

I ask that the Committee strongly consider providing an FY 2014 NSF budget of at least \$7.333 billion. Thank you for considering this request.

Susan Barman, Ph.D., President, American Physiological Society

The American Physiological Society (APS) thanks you for your sustained support of science at the NSF and NASA. The APS is a professional society, numbering nearly 11,000 members, dedicated to fostering research and education as well as the dissemination of scientific knowledge concerning how the organs and systems of the body function. In this letter we offer our recommendations for FY 2014 funding levels for these two agencies.

- **The APS urges you to fund the FY 2014 NSF budget at a net level of \$7.4 billion to prevent further erosion of program capacity.**
- **The APS urges you to restore cuts to NASA's life sciences research budgets and to increase funding for the Human Research Program.**

The APS recognizes that the economic challenges facing the country demand that government resources be used judiciously. NSF and NASA support scientific research and technology development programs that are critical to the future technological excellence and economic stability of the United States. Federal investment in research is critically important because breakthroughs in basic and translational research are the foundation for new technologies that help patients, fuel our economy, and provide jobs.

NSF funds outstanding research and education programs

NSF provides support for approximately 20% of federally funded basic science and is the major source of support (68%) for non-medical biology research, including integrative, comparative, and evolutionary biology, as well as interdisciplinary biological research. The majority of the NSF funding is awarded through competitive, merit-based peer review, ensuring that the best possible projects are supported. NSF has an excellent record of accomplishment in terms of funding research that produces results with far-reaching potential. It has been shown time and time again that the knowledge gained through basic biological research is the foundation for more applied studies that lead to improvements in the lives of ecosystems, animals, and humans.

In addition to funding innovative research in labs around the country, the NSF education programs foster the next generation of scientists. The APS is proud to have partnered with NSF in programs to provide training opportunities and career development activities to enhance the participation of underrepresented minorities in science. The APS was recognized for these efforts in 2003 with a Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring (PAESMEM), funding for which was provided by NSF. We believe that NSF is uniquely suited to foster science education programs of the highest quality, and we recommend that Congress continue to provide federal funds for science education through the NSF.

The APS joins the Federation of American Societies for Experimental Biology (FASEB) to recommend that the NSF be funded at a level of \$7.4 billion in FY 2014 so that it can support a sustainable research program that follows a funding trajectory reflecting the level authorized in the America COMPETES Act.

Support for Life Sciences Research should be increased at NASA

NASA sponsors research across a broad range of the basic and applied life sciences, including gravitational biology, biomedical research and the Human Research Program (HRP). The gravitational biology and biomedical research programs explore fundamental scientific questions through research carried out both on Earth and aboard the International Space Station, which provides an environment for the conduct of experiments in space. The HRP at NASA conducts unique research and develops countermeasures with the goal of enabling safe and productive human space exploration.

During prolonged space flight, the physiological changes that occur due to microgravity, increased exposure to radiation, confined living quarters, and alterations in eating and sleeping patterns can lead to debilitating conditions and reduced ability to perform tasks. APS scientists are actively engaged in research that explores the physiological basis of these problems with the goal of contributing to the identification of therapeutic targets and development of countermeasures. The knowledge gained from this research is not only relevant to humans traveling in space, but is also directly applicable to human health on Earth. For example, some of the muscle and bone changes observed in astronauts after prolonged space flight are similar to those seen in patients confined to bed rest during periods of critical illness as well as during the process of aging.

NASA is the only agency whose mission addresses the biomedical challenges of manned space exploration. Over the past several years, the amount of money available for conducting this kind of research at NASA has dwindled. The overall number of projects and investigators supported by NASA through the HRP, National Space Biomedical Research Institute and Exploration and Technology Development program has decreased markedly (<https://taskbook.nasaprs.com/Publication/>). In the past, appropriations legislation specified funding levels for biomedical research and gravitational biology, but recent internal reorganizations at NASA have made it difficult to understand how much money is being spent on these programs from year to year. The APS recommends that funding streams for these important fundamental research programs be clearly identified and tracked within the NASA budget. The APS also recommends restoration of cuts to peer-reviewed life sciences research.

As highlighted above, investment in the basic sciences is critical to our nation's technological and economic future. The APS urges you to make every effort to provide these agencies with increased funding for FY 2014.



**AMERICAN
SOCIETY FOR
MICROBIOLOGY**

Public and Scientific Affairs Board

*Statement of the American Society for Microbiology
Submitted to the
House Committee on Appropriations
Subcommittee on Commerce, Justice and Science and Related Agencies
On the Fiscal Year 2014 Appropriation for the National Science Foundation*

March 21, 2013

The American Society for Microbiology (ASM) is pleased to submit the following testimony on the Fiscal Year (FY) 2014 appropriation for the National Science Foundation (NSF). The ASM is the largest single life science organization in the world with more than 37,000 members.

The National Science Foundation supports fundamental research and education across all fields of science and engineering. There is no doubt that NSF funded research contributes greatly to the Nation's economic growth and improves quality of life. Since its creation in 1950, the NSF mission has been to promote the progress of science and broadly stimulate discovery and innovation important to human welfare.

NSF provides more than 20 percent of federal support for basic research at US academic institutions with approximately 11,000 new grant awards per year selected from over 40,000 proposals. Every year, the NSF supports at least 200,000 scientists, engineers, educators and students at universities, laboratories, and research sites throughout the United States and worldwide. NSF resources also fuel the Nation's strategy to elevate K-12 education in science, technology, engineering and mathematics (STEM), toward a science literate public and an expanded technical workforce.

The ASM is concerned about sequestration cuts to the NSF budget. NSF's tradition of expending most of its budget to support extramural projects will inevitably link budget cuts to diminished research throughout the country. We urge Congress to support the NSF FY 2014 budget at the highest level possible.

NSF Funding Stimulates Innovation, Research and Infrastructure

Each year, nearly all of the NSF's appropriation directly supports extramural STEM related activities. In the Agency's FY 2013 budget request, 81 percent was allocated for research and related activities, 12 percent for STEM education and workforce expansion, and 3 percent for major research equipment and infrastructure construction. NSF funding of individual and institutional research collectively empowers the US research enterprise as NSF fulfills strategic goals to: "transform the frontiers and innovate for society."

1752 N Street, NW • Washington, DC • 20036
tel: 202-737-3600 • fax: 202-942-9335 • email: publicaffairs@asmusa.org

Most NSF research funding distributed each year supports US academic institutions (77 percent in FY 2013). In a recent funding cycle, NSF's share of federal funding for basic academic research in the United States included: 48 percent for physical sciences, 39 percent for engineering, 59 percent for environmental sciences, 61 percent for social sciences, 64 percent for mathematics, 64 percent for non NIH biological sciences, and 81 percent for computer sciences. The broad scope of the NSF's mission allows for funding to most of the nation's academic STEM-associated departments, schools, and disciplines. In FY 2011, the NSF awarded 11,200 competitive awards to 1,875 institutions, supporting 276,000 researchers, postdoctoral fellows, trainees, teachers and students.

US industries commercializing STEM discoveries are increasingly reliant on scientists and engineers outside of industry for basic research. Reports like the National Science Board's 2012 'Science and Engineering Indicators' consistently point to the United States' world class universities as incubators for economically valuable technology based products, as well as the dire need for more US students in STEM graduate programs.

Declines in state funding are threatening public university recruitment of top tier faculty and students, research performance and training of new scientists and engineers. According to an NSF report released in September, state per student funding for the Nation's principal public research universities dropped an average of 20 percent between 2002 and 2010, with some states falling as much as 48 percent. NSF has a long tradition of supporting new generations of scientists and engineers. Since 1952, it has awarded 44,000 Graduate Research Fellowships. More than 200 Nobel laureates have benefited from NSF funding and include half of the 2012 winners. The FY 2013 budget request included \$19 million for the NSSF Innovation Corps, among multiple programs to promote research training and careers.

NSF skillfully fosters large scale research that would be impossible without far sighted federal grant-award mechanisms. For example, the Experimental Program to Stimulate Competitive Research (EPSCoR) infuses economic and intellectual resources into states and funding projects comprising multiple disciplines and institutions. Three FY 2013 examples are Alaska's Adapting to Changing Environments project; Utah's Urban Transitions and Arid-region Hydro-sustainability project; and Wyoming's project to establish a research center on watershed hydrology, geophysics, remote sensing, and computational modeling. NSF support also builds research infrastructure like computational capabilities or multi user facilities such as US Antarctic stations. Last year, NSF became lead agency on the new US Ignite initiative to build, test, and explore next generation networks, to help transform US computing capabilities.

NSF Funding Expands Frontiers of Scientific Knowledge

Research in the United States becomes more expensive and complex each year. The NSF recognizes that there is unprecedented potential for innovative results. Boundaries that once defined engineering and science are dissolving into melded disciplines like geobiology and biophysics. Through NSF funding, US researchers explore science, engineering and technology in new ways that might otherwise be ignored. NSF's inclusive vision of basic research includes both the virologist using genetic sequencing in

a university laboratory and massive, difficult to resolve issues like nationwide energy needs, fragility of our environment, or recalcitrant infectious diseases.

The NSF supports clinical microbiology related research that offers public health protection, improves environments, technological advances that boost US industry, sustainable energy sources and other benefits. NSF funded projects from the past year offer examples of the contribution to basic research:

- Some bacteria that cause deadly cholera outbreaks can resist the human immune system by changing their surface electrical charge, according to a study reported last year. Based on this newly understood mechanism, the researchers are screening potential antibiotics against the pathogen.
- Scientists described how cytomegaloviruses (CMV) evade host immune defenses with a type of “accelerator circuit” in its DNA that allows the virus to quickly reach optimal numbers within the host cell, but stop short of killing the cell—suggesting approaches to developing new therapies against the virus. CMV infects more than half of adults worldwide and normally lies dormant within those infected.
- University researchers reported how the movement of individual soil bacteria (*Mycococcus xanthus*) is amplified within bacterial colonies to build waves of motion, spreading to engulf their prey. The scientists used computer modeling, followed by time-lapse microscopy, to elucidate the collective wave motion of *M. xanthus*, an organism useful in the growing field of systems biology.
- Scientists have discovered a unique symbiosis between single-celled algae and nitrogen-fixing bacteria in the ocean, with algae essentially replacing missing microbial genes typically responsible for several key metabolic pathways—bacteria provide nitrogen to the algae, algae carbon to the bacteria. Genomic analysis points to a possible model for early evolution of plant organelles like chloroplasts. The unusual bacteria are likely central to global nitrogen cycles.
- Research supported by NSF, the National Institutes of Health (NIH), and the Department of Energy has described how a bacterial plant pathogen (*Pseudomonas syringae*) tricks a host plant with a chemical signal mimicking part of the plant’s immune system, overcoming the host’s defenses by keeping open the plant’s stomata for more bacteria to invade. *P. syringae* causes disease in more than 50 plant species.

NSF excels in its support of collaborative research initiatives like the relatively new Ecology and Evolution of Infectious Disease (EEID) program, a joint effort with NIH and the US Department of Agriculture. Focusing on the dynamics of disease transmission, EEID’s multidisciplinary research already has added to understanding the globalization of infectious disease. Among the latest projects are those investigating how human activity like land-use trends has changed patterns in vector-borne pathogens, such as those responsible for West Nile infection, Lyme disease, and dengue fever. Another will uncover the ecological and socio-economic factors behind antibiotic resistance acquired by infectious disease pathogens, examining interactions among microbes, people, and animals in relatively isolated villages of Tanzania. Other 2012 EEID awardees are studying avian influenza, computer models of disease among marine invertebrates, and leptospirosis in Brazil.

The ASM appreciates the opportunity to submit comments and strongly urges that Congress fund the National Science Foundation at the highest possible level in FY 2014.



Animal Welfare Institute

900 Pennsylvania Avenue, SE, Washington, DC 20003
awionline.org phone: (202) 337-2332 fax: (202) 446-2131

TESTIMONY BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES

Nancy Blaney, Senior Policy Advisor
Submitted March 21, 2013

We wish to thank the Subcommittee for accepting our testimony as you consider Fiscal Year 2014 funding priorities under the Commerce, Justice, Science and Related Agencies Appropriations Bill. Our testimony addresses activities under the Office of Justice Programs (OJP) of the Department of Justice (DoJ).

We are grateful for the DoJ's OJP Bureau of Justice Assistance's continuing support for the Association of Prosecuting Attorneys' program of training, technical support, and other assistance for prosecutors, law enforcement, and others to enhance the prosecution of animal abuse and animal fighting crimes. We are proud to partner with APA in this ongoing effort (AWI does not receive any federal funding for its work with APA), and I am pleased to be able to share with you the work that has been done as a result of BJA's support.

APA has held three national training conferences—in Los Angeles, Denver, and Washington D.C.—with support from BJA as well as from other partners. These national meetings bring together participants and speakers from many disciplines—law enforcement, psychology, animal control, veterinary medicine, the domestic violence and juvenile justice communities, etc.—to share their experiences dealing with animal cruelty and animal fighting, and to encourage cross-pollination among participants. Topics have included the basics of conducting an animal cruelty investigation; charging, prosecuting, and sentencing in animal cruelty cases; the use of forensics experts in court; the benefits of joint federal-state investigations; and cutting edge considerations in the use of digital evidence. Participants then put theory into practice through a mock trial.

As an example of the impact that such training can have, an assistant prosecutor from a large urban county attended the very first conference. He and a colleague were taking on animal cruelty cases on their own, in addition to their regular caseload, and were feeling very much out in the wilderness. Today, their animal protection unit boasts four prosecutors who review and handle all animal-related cases (as well as other cases) and over the past three years has achieved a 98 percent conviction rate. One of the unit's cases resulted in significant jail time for two men who set fire to a dog in front of several witnesses, including children.

Two participants in the Los Angeles conference last year submitted the following testimonials, which were published in the Fall/Winter 2012/2013 issue of *Lex Canis*, the newsletter of the APA's Animal Cruelty and Fighting Program:

AS A PARTICIPANT in the 3rd National Animal Cruelty Prosecution Conference, I experienced a comprehensive overview of the aspects of prosecuting animal abuse cases - from collecting evidence, identifying important elements of search warrants, and evaluating a case for filing, to communicating with expert witnesses such as veterinarians, preparing for trial, and sentencing recommendations....

One important concept that resonated with me is the need for cooperation among a wide variety of community stakeholders: prosecutors, law enforcement agencies, animal control officers, shelters, veterinarians, and of course, community members at large. For example, the first witness to animal abuse may be a lay person, such as a postal or utility worker, who has noticed odors or debris. Furthermore, because animal control officers may not be on duty 24/7, a law enforcement officer may be the first responder to a report of animal abuse. This underlines the need for community education as well as for the training of law enforcement officers in the legal and evidentiary issues unique to animal cruelty crimes.

Attendees were also treated to an overview of the immensely uplifting public relations campaign in Baltimore to prevent animal abuse. Prominent male role models are featured with their pets in advertisements proclaiming; "Only a Punk Would Hurt a Cat or Dog." This successful campaign further highlights the importance of community stakeholders working together not only to prosecute cases of animal abuse, but also to act early to prevent it—particularly given the frightening link between animal abuse and domestic violence, child abuse, and even elder abuse.

Finally, a hands-on moot court was the focus of the last day. This provided a unique opportunity for prosecutors, veterinarians, and law enforcement to collaborate to address the challenges of a real case.

Each conference participant received a flash drive to take home containing a wealth of resources, including handouts from the presentations as well as sample jury instructions, *voir dire* questions specific to animal abuse cases, veterinarian report templates, and more. I have had the opportunity to share some of these with the local animal control department, and the jury instructions have been particularly helpful while reviewing reports for filing consideration. I found the conference to be incredibly informative, and particularly as a new DDA, I feel substantially more prepared to tackle animal abuse cases in my community.

—By Michelle Bergey, a new deputy district attorney with the San Bernardino County Office of the District Attorney.

ARRIVING AT THE 3rd National Animal Cruelty Prosecution Conference and trying to choose which session to attend kept me up through the early morning hours of day one. As an attorney, I could not decide if I should attend the legal-focused sessions or branch out to understand the veterinary and law enforcement side of animal cruelty prosecution. What's more, trying to condense my conference experience into a brief article has been equally as challenging.

The first session, by the Los Angeles County District Attorney's Office, was awe-inspiring. I cannot think of a better way to kick off an animal cruelty prosecution conference than by learning about one of the most innovative prosecution programs in the country. From the investigation to the prosecution and sentencing of animal cruelty cases, it was incredibly helpful to get an outline of handling a case properly from the very beginning and to follow through as a zealous advocate of the victim through the sentencing phase.

One of the most notable and useful conference sessions applicable to the work I do was "Using Veterinary Forensics to Prove Your Case," by Dr. Melinda Merck of Veterinary Forensics Consulting, LLC, and Sherry Ramsey of the Humane Society of the United States. Understanding the nuances of animal cruelty cases is crucial to a successful prosecution. Both speakers addressed the unique issues with noteworthy examples from past cases, even delving into instances of cruelty not traditionally prosecuted. I am constantly reviewing my notes and the

materials from this session as I work through a current case; and learning to ask the veterinarian the right questions, as we did at the conference, has proven to be invaluable.

Applying what I learned at the conference to a real case only reinforced the importance of the collaborative work we all do in the area of animal cruelty prosecution and affirmed the need for outreach programs like the new Animal Cruelty Prosecution Clinic at the University of Kansas. At least once a week, I refer back to my conference notes and the educational material we received.

I tried as best I could to attend a variety of the sessions, but I left Los Angeles only wishing I had more time. Thank you to the Association of Prosecuting Attorneys and the Bureau of Justice Assistance for putting on a stellar conference. I am anxiously awaiting the conference in 2013.

--By Katie Bray Barnett, an attorney at the Barnett Law Office, LLC, in Lawrence, Kansas. She assists humane societies on a variety of issues including animal cruelty prosecution, forfeiture of seized animals, community mediation, as well as working with area municipalities on animal-related legislation. Katie is the founder of the Student Animal Legal Defense Fund and the Animal Cruelty Prosecution Clinic at the University of Kansas School of Law.

Training and outreach do not stop with these large meetings, however. APA maintains a listserv, hosts webinars addressing issues of practical concern to prosecutors and the many others whose work is connected with animal cruelty crimes, and responds to requests for technical assistance. The Animal Cruelty and Fighting Program section of its website makes available such valuable resources as training and informational manuals; state animal cruelty statutes; animal cruelty case law summaries; a library of briefs, motions, search warrants, and legal memos; and downloadable versions of the webinars.

APA also publishes, distributes, and posts on its website the newsletter *Lex Canis*, each issue of which (there have been 13 so far) provides readers with program updates, an in-depth feature, and summaries of investigations, cases, changes in the law, and other developments. For example, recent features have focused on strategies for achieving success in prosecuting cases under state animal cruelty laws; dealing with hoarders; the innovative work of the Mayor's Anti-Animal Abuse Advisory Commission in Baltimore; and, in its very first issue in 2009, the effect of the foreclosure crisis on rising abuse and abandonment of companion animals.

APA and AWI have taken advantage of opportunities to address new audiences about the relationship between animal cruelty and interpersonal violence, and how those audiences can respond both to improve prosecutions of such cases and to reduce their incidence. Several presentations were made to the National Conference of Juvenile and Family Court Judges and to the Pennsylvania Bar Institute.

Last but not certainly not least, APA has assembled an Animal Cruelty Advisory Council composed of prosecutors, investigators, law enforcement, veterinarians, psychologists, members of the animal protection and domestic violence communities, and others, to identify issues, resource needs, and strategies. It brings these same professionals together to provide its multidisciplinary training, and also calls on them individually for topic-specific web-based training and materials.

We respectfully urge the subcommittee to continue funding the BJA's National Animal Cruelty and Fighting Initiative and to encourage the Department's ongoing interest in addressing animal-related crimes. Such crimes create a culture of violence—and a cadre of violent offenders—and more vigorous attention to such crimes makes communities safer overall.

The connection between animal abuse and other forms of violence has been firmly established through experience and through scientific studies. Among the most well-documented relationships is that between animal cruelty and domestic violence, child abuse, and elder abuse. For example, up to 71 percent of victims entering domestic violence shelters have reported that their abusers threatened, injured, or killed the family pet; batterers do this to control, intimidate, and retaliate against their victims. Batterers threaten, harm, or kill their children's pets in order to coerce them into allowing sexual abuse or to force them into silence about abuse.ⁱ Criminals and troubled youth have high rates of animal cruelty during their childhoods, perpetrators were often victims of child abuse themselvesⁱⁱ, and animal abusers often move on to other crimes. In 1997, the Massachusetts Society for the Prevention of Cruelty to Animals (MSPCA) released the results of a review of animal cruelty cases it had prosecuted between 1975 and 1996. Seventy percent of the individuals involved in those cases had been involved in other crimes, and animal abusers were five times more likely to commit a violent offense against other people.

More recently, an FBI special agent (who is also a member of the APA's Animal Cruelty Advisory Council) is currently overseeing a research project that involves "analyzing the criminal histories of offenders who were arrested for active animal cruelty, in order to further examine the potential link between animal cruelty and violence against persons." "According to an initial analysis published in a dissertation (Leavitt, 2011), the majority of the 66 offenders examined so far "had prior arrests for other crimes," including interpersonal violence (59 percent), assault (39 percent), and assault of a spouse or intimate partner (38 percent); 17 percent had a history of sexual offenses.

Another connection that is all too common exists among animal fighting, gangs, and drugs, illegal guns, and other offenses. The Animal Legal and Historical Center at the Michigan State University College of Law describes dogfighting in these stark terms: "The notion that dogfighting is simply an animal welfare issue is clearly erroneous. Until the past decade, few law enforcement officials or government agencies understood the scope or gravity of dogfighting. As these departments have become more educated about the epidemic of dogfighting and its nexus with gang activity, drug distribution rings, and gambling networks, many have implemented well designed, sophisticated task forces. The magnitude of criminal activity concurrently taking place at the average dogfight is of such a scope as to warrant the involvement of a wide range of agencies, including local, regional, and federal law enforcement agencies and their specialized divisions such as organized crime units, SWAT teams, and vice squads, as well as animal control agencies and child protective services."

Further evidence of the accuracy of the above assessment comes from a U.S. Drug Enforcement Administration report on the sentencing of a Louisiana drug trafficking kingpin, which described him as "an avid pit bull and cock fighter [who] utilized these illegal events as a networking tool in order to recruit members to transport and sell marijuana and cocaine for his organization."

Animal fighting is barbaric and is a violent crime in the truest sense of the term. It causes immense suffering to countless numbers of innocent animals and its presence threatens the safety of the entire community. It is illegal under both state and federal law, so it well serves the entire community for law enforcement to have the most powerful tools possible to eradicate it. In fact, legislation has been introduced in the House and Senate that would add to these tools by closing a significant loophole in the law. Animal fighting is fueled not just by those who train and fight the animals and finance the fights, but also by spectators. Spectators are not innocent bystanders; they are active participants in and enablers of these criminal enterprises—and they also provide

“cover” during raids by allowing the organizers, trainers, etc., to “blend into the crowd” to escape arrest. The Animal Fighting Spectator Prohibition Act (H.R. 2492 and S. 1947) makes knowingly attending an animal fight punishable by fines and jail time and also makes it a separate offense, with higher penalties, to knowingly bring a minor to such an event. Forty-nine states have already outlawed attendance at an animal fight.

At the same time, it must be remembered that animal abuse is more than a “gateway” behavior. It is also a crime in its own right. It is a crime everywhere in the U.S., and certain egregious acts are felonies in 48 states (it was 47 this time last year!) and the District of Columbia. Some states have even enacted or are considering provisions that enhance the penalty for animal cruelty when it is committed in front of a child. Twenty-two states also now allow the inclusion of companion animals in domestic violence restraining orders.

All laws are not created equal, however; activity that constitutes a felony in one state may still only be a misdemeanor in another. In some states, cruelty rises to a felony only upon a second or third offense, or only if the animal dies; if he survives, no matter how severe his injuries, it is still a misdemeanor.

The key to offering animals the most protection possible, however weak or strong the statute, lies in ensuring both awareness of the law, vigorous enforcement, and prosecution of violators. While many in law enforcement and the courts recognize animal abuse for the violent crime that it is and act accordingly, there are those who do not take it seriously, treating it as no more urgent than a parking infraction. Others genuinely want to act decisively but may lack the necessary resources, support, or expertise. Moreover, enforcement can be complicated by the laws themselves—weak laws are bad enough, but additional problems may arise from confusion over jurisdiction or limitations in coverage—or by pressure to dispose of cases quickly.

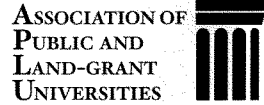
OJP/BJA showed great vision in recognizing that by identifying precursor crimes, such as animal cruelty and animal fighting, and ensuring proper adjudication of such cases, our criminal justice system can reduce the incidence of family and community violence and change the path of potential future violent offenders. It is especially with respect to that latter goal that APA and AWI are also calling attention to the impact that experiencing animal cruelty has on children and their possible future involvement in the juvenile justice system; many youths in juvenile detention facilities have been exposed to community and family violence—which arguably includes animal fighting and abuse.

There are two audiences for the message and resources the BJA initiative makes available: those who still need to be convinced of the importance of preventing and punishing animal-related crimes, for the sake both of the animals and of the larger community, and those who are dedicated to bringing strong and effective cases against animal abusers but may need assistance to do so.

The National Animal Cruelty and Animal Fighting Initiative sends a very strong message to prosecutors and law enforcement that crimes involving animals are to be taken seriously and pursued vigorously, and offenders must be held accountable.

¹ The study “I’ll only help you if you have two legs,” or Why human services professional should pay attention to cases involving cruelty to animals, by Loar (1999), as cited on the website of the National Coalition Against Domestic Violence (www.ncadv.org)

ⁱⁱ “Woman’s Best Friend: Pet Abuse and the Role of Companion Animals in the Lives of Battered Women,” by Flynn (2000), as cited at www.ncadv.org



**FY 2014 Testimony of the ASSOCIATION OF PUBLIC AND LAND-GRANT UNIVERSITIES'
(A·P·L·U) Board on Oceans, Atmosphere, and Climate (BOAC)
to the House Appropriations Subcommittee
on Commerce, Justice, Science and Related Agencies
Submitted by co-chairs Dr. Eric Barron*, President of Florida State University, and
Dr. Eugene S. Takle, Director of the Climate Science Program and Professor of
Atmospheric Science, Iowa State University,**

On behalf of the Association of Public and Land-grant Universities' Board on Oceans, Atmosphere, and Climate (BOAC), we thank you for the opportunity to provide support of and recommendations for the proposed FY 2014 budgets for the National Oceanic and Atmospheric Administration (NOAA), the National Aeronautic and Space Administration (NASA) and the National Science Foundation (NSF). BOAC represents over 300 scientists and administrators at APLU's 218 member universities and systems. *We strongly recommend maximum support for NOAA, NSF, and NASA's Science Account.*

As external partners, we help these agencies fulfill their mission to ensure homeland security, maintain global communications, increase economic vitality, and inform the public of atmospheric and marine ecological health threats. To fulfill these missions, the nation depends upon reliable science.

About \$3 trillion or one-third of the U.S. economy, including industries as diverse as agriculture, finance, energy, insurance, transportation, real estate and outdoor recreation, is highly weather- and seasonal climate-sensitive. It is estimated that all weather combined can produce a variation in the gross domestic product of 3.4% or \$485 in 2008 dollars, the year studied. Extreme weather events, like tornadoes, hurricanes, oppressive heat, heavy precipitation both wet and frozen, catastrophic floods, dust storms and drought, clearly demonstrate both the immediate and long-term impacts that weather and seasonal climate can have on a region. In 2012, the U.S. had no less than eleven billion-dollar-plus events including: Hurricane Sandy (\$62 billion), 2012 drought (\$35 billion and counting), March 2-3 tornado outbreak (\$4 billion), June 29 Derecho (\$3.75 billion), and Hurricane Isaac (\$2 billion).

Environmental data collected and distributed by NASA, NSF and NOAA represent a national resource used not only by universities for research, education and outreach, but also by private industry to produce the products and services utilized by the energy, transportation, public utility, water, recreation resource, food, insurance, homeland security and other sectors of the Nation., all of which contribute to the economic vitality of the country and the well-being of the citizenry of the United States.

In order to address the nation's needs, we need to ensure:

- A robust observing system, as described by the NRC's 2009 report, "*Observing Weather and Climate from the Ground Up, a Nationwide Network of Networks*;
- Forecast and predictive capability for the nation
- Robust extramural funding to leverage the talents of the nation and to ensure the education of future scientists
- Outreach to help translate the science into actionable items for communities.

Currently, some of these systems are being damaged by the on-going sequester. Furthermore, based on the caps put in place in the Budget Control Act of 2011, discretionary spending is poised to bear the brunt of cuts for the next decade. A slow bleeding of our nation's science agencies will leave our nation poorly prepared for a changing world and unable to create the technological innovations needed for future challenges. Forecasting the onset, duration and effects of solar storms, atmospheric weather events, coastal storms, floods and storm surges, sea-level variability, toxic algal blooms, and seasonal climate conditions depend on *sustained funding* of the science and technology. As your committee faces the incredibly difficult task of deciding where to spend its dollars, please consider the life-saving technologies (Doppler radar and its upgrades, 7 day warnings for hurricanes) developed from past investments in science by Congress and what technologies may come next from investment by this Congress.

Maintaining strong support for NOAA, NASA, and NSF will serve the nation well in advancing science and technologies that subsequently undergird the economy, security and well-being of the citizenry of the United States, as it has done for the past several decades. Outlays in the natural and earth systems' science and technology programs of NOAA, NSF, and NASA have and continue to improve and make the nation's surface, air and marine transportation safer and more efficient, advance energy technology, provide the scientific and technological advances to help the defense industry better meet its technology needs, contribute to advances in public health, make the country more resilient to environmental hazards, provide agricultural, energy and transportation sectors with seasonal outlooks, and grow the knowledge base upon which society can make wise environmental and technologically forward-looking management decisions.

NOAA, NASA and NSF each play unique roles in a number of high-priority U.S. and international initiatives. All three agencies also support research at our member institutions that provides critical information to policymakers and communities across the country, as well as advances US science and technology through strong collaboration with these agencies.

Below we comment on specific needs of each of the agencies and the science communities they collaborate with:

NOAA

NOAA provides important services to all Americans, services that are vital to our economy, national security, surface, marine and air transportation, human safety and the health of human and marine ecological systems.

Of ongoing concern is the need for increased and sustained support of satellite and in situ environmental observing systems. As reported in several prior and recent National Research

Council studies, (*Observing Weather and Climate from the Ground Up, a Nationwide Network of Networks*, NRC, 2009), the needs are particularly acute for urbanized areas as well as mountain, ocean and coastal regions. Vertical profiles of variables such as water vapor, winds, and temperatures are virtually non-existent over land and are non-existent over water. Over land, the primary recommendation is for the placement of vertical profilers, vertically pointing radars, acoustic sounders and lidars that collect vertical observations of wind and temperature from the ground up through the lower atmosphere.

While we recommend sustained support for NOAA's satellite programs, we point out that this support *should not be at the expense of NOAA's extramural funding* of research, education and outreach.

We point out that extramural funding is cost effective. Its highly competitive nature ensures up-to-date qualifications and cutting-edge approaches without the continuing costs of developing, maintaining and updating these skills in house. It provides essential training in research skills to provide the next generation of researchers. Furthermore, NOAA has benefited enormously from its extramural partnerships, engaging hundreds of scientists in issues of direct and critical relevance to the Nation, at remarkably low cost. In 2004 the NOAA Science Advisory Board's Research Review Team report concluded:

"...Extramural research is critical to accomplishing NOAA's mission. NOAA benefits from extramural research in many ways, including: access to world class expertise not found in NOAA laboratories; connectivity with planning and conduct of global science; means to leverage external funding sources; facilitate multi-institution cooperation; access to vast and unique research facilities; and access to graduate and undergraduate students. Academic scientists also benefit from working with NOAA, in part by learning to make their research more directly relevant to management and policy. It is an important two-way street...***NOAA cannot accomplish its goals without the extramural community, specifically the universities and institutions that represent the broad range of expertise and resources across the physical, biological, and social sciences (emphasis added)***. Moreover, there is the important issue of maintaining a scientific and technologically competent workforce in NOAA and the workforce is another "product" of the extramural research community...Also it is important that during difficult budget periods that NOAA not disproportionately target the extramural research for budget cuts."

NOAA's support of environmental research and education via Cooperative Institutes and programs such as the Oceanic and Atmospheric Research's Sea Grant and the Office of Ocean Exploration and Research programs are critical to university research, education and outreach. Similarly, NOAA's role in understanding the oceans and coastal areas and oceanic resources through the National Centers for Coastal Ocean Science support and help maintain sustainable coastal economies.

According to the National Sea Grant Advisory Board, the Nation received the following in return for its FY 2012 investment of \$62M in Sea Grant: \$170M in direct economic benefits to the Nation, which represents nearly a 2.5 to 1 return on the federal investment; 630 new businesses were created or retained; more than 3,800 jobs were created or retained due to Sea Grant efforts;

and 900 communities across the nation have adopted more sustainable economic or environmental development practices and policies.

NASA

In 2007, the National Academies issued the report, *"Earth and Science Applications from Space: National Imperatives for the Next Decade and Beyond."* The report found that between 2000 and 2009 funding for Earth Sciences (ES) had fallen substantially. ES research is absolutely critical to understanding climate change, such as the decline of Earth's ice sheets and the health of the global oceans. For this reason, BOAC is heartened by the Administration's request for NASA's expanded and enhanced science mission. Past investments in NASA's science mission have funded university research that has resulted in the development of new instruments and technologies and in valuable advances in weather forecasting, climate projections and understanding of Earth ecosystems.

Without the tools developed at NASA or with agency support, oceanic, atmospheric, hydrologic and earth-system scientists and the nation would have only a fragmentary picture of the interconnected functioning of the planet's oceans, atmosphere and land. NASA is currently developing a sensor that will for the first time give scientists and resource planners a global picture of the world's terrestrial water supplies. Currently many lakes and rivers are not monitored and there is no centralized location for water resource information. The NASA data archive is an irreplaceable collection of environmental information that researchers depend upon. Furthermore, through its support for young scientists and graduate students, the NASA science mission supports innovation. BOAC supports the NASA budget and applauds the special attention that the White House has paid to restoration of NASA science.

Finally, we support funding NASA to develop and implement a scatterometer mission with fast community access to those data, capability to distinguish between wind and rain and a higher orbit for coverage of Alaskan waters. The scatterometer has been a critical component of hurricane prediction.

NSF

BOAC supports funding of NSF, which is critical to U.S. basic research. NSF supplies almost two-thirds of all federal funding for university-based, fundamental research in the geosciences. GEO-supported research increases our ability to understand, forecast, respond to and prepare for environmental events and changes. NSF's Water Sustainability and Climate program addresses the pressing challenge of providing adequate water quantity and quality in light of both burgeoning human needs and increasing climate variability and change. Through facilities such as the Oceans Observatory Initiative, the Integrated Ocean Drilling Program, and NCAR-Wyoming supercomputer, NSF provides the academic community with advanced capabilities that it would not be able to afford if conducted through individual institutions. It does so without growing the needs for increased personnel, training and retooling in house at federal laboratories and while training the next generation.

The National Center for Atmospheric Research (NCAR), based in Boulder Colorado, is a Federally Funded Research and Development Center (FFRDC) of the National Science Foundation, managed by the University Corporation for Atmospheric Research (UCAR). It is funded out of the Atmospheric and Geospace Sciences Division of the Geosciences Directorate.

NCAR performs research that positively affects the economy and saves lives. The laboratory makes weather forecasts more accurate, enables better prediction of severe storms, including tornadoes and hurricanes, and manages climate computer models that inform stakeholder decisions regarding agriculture, water resource management, transportation, and energy resources. It extends the atmospheric sciences research capabilities of the nation's universities through management of weather and climate observing platforms such as research aircraft, radars, and satellites. The laboratory provides computing capacity to this broad community through the NCAR-Wyoming Supercomputing Center (NWSC), opening this year.

Summary

Together, NOAA, NASA, and NSF provide critical earth observations and research funding for scientists, engineers and mathematicians working to increase understanding of natural phenomena of economic and human significance. BOAC thanks the Committee for its continued support of these critical agencies.

*This testimony is submitted by Eric Barron solely in his capacity as co-chair of the BOAC of APLU, not as the President of Florida State University.

Thank you for taking time to review our recommendations.

Testimony of Anthony F. (Bud) Rock
 Chief Executive Officer, Association of Science-Technology Centers
 submitted to the
 House Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies
 March 21, 2013

Seeking Support for the Following Programs in FY 2014:
National Science Foundation:
Education & Human Resources/Advancing Informal Science Learning
National Oceanic and Atmospheric Administration:
Environmental Literacy Grants Program
National Aeronautics and Space Administration:
Competitive Program for Science Museums, Planetariums and NASA Visitor Centers Plus
Other Opportunities

Introduction

Chairman Wolf, Ranking Member Fattah, and Members of the Subcommittee—thank you for the opportunity to submit testimony to the House Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies. My name is Anthony (Bud) Rock, and I serve as the Chief Executive Officer of the Association of Science-Technology Centers (ASTC). My testimony will address the importance of informal science, technology, engineering, and mathematics (STEM) education, with a specific focus on the fiscal year (FY) 2014 budgets for programs at three federal agencies over which this subcommittee has jurisdiction: (1) the Advancing Informal STEM Learning (AISL) program at the National Science Foundation (NSF), which would have received \$47.82 million in FY 2013 under President Obama's budget request, a \$13.58 million (22%) cut from the FY 2012 estimated level of \$61.40 million; (2) the Environmental Literacy Grants (ELG) Program at the National Oceanic and Atmospheric Administration (NOAA), which was slated for termination under the President's FY 2013 budget request after receiving an estimated level of \$5.1 million for FY 2012; and (3) the Competitive Program for Science Museums, Planetariums and NASA Visitor Centers Plus Other Opportunities (CP4SMP+) at the National Aeronautics and Space Administration (NASA), which also was not funded in the President's FY 2013 budget request but received \$7 million in estimated funding as recently as FY 2010.

Our Request

On behalf of ASTC and the 383 science centers and museums we represent here in the United States, I urge the Subcommittee to continue its strong support for informal STEM education programs within the three federal agencies cited above as its work on the Commerce, Justice, Science, and Related Agencies (CJS) Appropriations Bill for fiscal year 2014 progresses. **In particular, I urge you to do all you can to maintain funding for NSF's AISL program, NOAA's ELG Program, and NASA's CP4SMP+. Furthermore, I hope you will once again consider including the following suggested report language that would clearly direct NSF to use the AISL program to continue to support public engagement in STEM:**

The AISL program will invest in the design, development, and implementation of models, resources, and public engagement programs for STEM learning throughout the lifespan. Proposals can use a broad range of communication formats and experiences, such as mobile and broadcast media, virtual learning environments, exhibitions, TV, radio, films, citizen science, and after-school and/or out-of-school programs.

Including this report language in the FY 2014 CJS Appropriations Bill remains a priority for ASTC, and it is offered in response to a change in the AISL program's focus that has lessened the positive community impact science centers and museums can have through securing AISL awards. ASTC regularly hears from members expressing concerns that the AISL program has become centrally focused on formal (university-led) research at the expense of educational and public engagement efforts conducted through science centers.

About ASTC and Science Centers

ASTC is a nonprofit organization of science centers and museums dedicated to providing quality educational experiences to students and their families as well as furthering public engagement with science among increasingly diverse audiences. Now, more than ever before, we must spark the interests of our young people in all that science has to offer. This is exactly why community-based science centers throughout the country are providing unique educational programs that excite, energize, and enrich our understanding of science and its many applications—often with support from NSF, NOAA, and NASA, in addition to other federal agencies.

ASTC now counts 628 members, including 481 operating or developing science centers and museums in 45 countries. Collectively, these institutions garner 95 million visits worldwide every year. Here in the United States, your constituents pass through science center doors over 65 million times to participate in intriguing educational science activities and explorations of scientific phenomena.

Science centers come in all shapes and sizes, from larger institutions in big metropolitan areas to smaller centers in somewhat less populated ones. ASTC represents institutions as diverse as the Children's Science Center (Herndon, VA), the Franklin Institute (Philadelphia, PA), the Mary G. Harden Center for Cultural Arts (Gadsden, AL), the Children's Museum of Houston (Houston, TX), the California Science Center (Los Angeles, CA), and the Imaginarium Science Center (Fort Myers, FL). As part of its mission, ASTC works with these science centers and museums—small, large, and everywhere in-between—to educate and inform visitors on critical societal issues, locally and globally, where understanding of and engagement with science are essential. As liaisons between the science community and the public, science centers are ideally positioned to heighten awareness of critical issues including energy, the environment, infectious diseases, and space; increase understanding of important new technologies; and promote meaningful informed debate between citizens, scientists, policymakers, and the local community.

Science Centers as an Integral Part of the Nation's Educational Infrastructure

Science centers are physical—and virtual—places where science and citizens meet. Many have scientists on staff, and some feature research facilities on-site. Through exhibits and programming—like lectures and science cafés—science centers bring current research findings

to the public while encouraging discussion and debate of current science issues. More and more, science centers are also getting members of the public involved in research projects themselves.

Our centers reach a wide audience, a significant portion of which are school groups. Here in the U.S., 90% of our members offer school field trips, and we estimate that nearly 11 million children attend science centers and museums as part of those groups each year. Field trips, however, are just the beginning of what science centers and museums contribute to our country's educational infrastructure: 90% offer classes and demonstrations; 89% offer school outreach programs; 82% offer workshops or institutes for teachers; 75% offer curriculum materials; 71% offer programs for home-schoolers; 56% offer after-school programs; 41% offer programs that target senior citizens, and; 39% offer youth employment programs.

The Importance of Federal Support for STEM Education

As the Subcommittee knows, there is a strong consensus that improving STEM education is critical to the nation's economic strength and global competitiveness in the 21st century. Well-known reports like the National Academies' *Rising Above the Gathering Storm* (2005) and the President's Council of Advisors on Science and Technology's *Prepare and Inspire* (2010) have emphasized the need to attract and educate the next generation of American scientists and innovators, and have recommended that we increase our talent pool by vastly improving K-12 STEM education. In its report entitled *Learning Science in Informal Environments: People, Places, and Pursuits* (2009), the National Research Council (NRC) of the National Academies said "beyond the schoolhouse door, opportunities for science learning abound..." The NRC found, among other things, that there is ample evidence to suggest that science learning takes place throughout the lifespan and across venues in non-school settings. The report also highlighted the role of after-school STEM education in promoting diversity and broadening participation, finding that non-school environments can have a significant impact on STEM learning outcomes in historically underrepresented groups and that these environments may be uniquely positioned to make STEM education accessible to all.

Last year, the United States Conference of Mayors (USCM) recognized the important ties between science centers and museums and the federal government. At its 80th Annual Meeting, the USCM adopted a resolution calling on Congress and the President to fully fund federal informal science education programs. The resolution also recognized the unique and essential role that American science centers play in providing math and science education for students of all ages while acknowledging the vital learning that goes on in science centers throughout the country.

National Science Foundation

Located within NSF's Directorate for Education and Human Resources (EHR) and the Division of Research on Learning in Formal and Informal Settings (DRL), the Advancing Informal STEM Learning program (formerly known as "Informal Science Education") invests in research and development of innovative and field-advancing out-of-school STEM learning and emerging STEM learning environments.

For years, AISL funding has supported museum-community partnerships like “Lupe’s Story,” where the Children’s Museum of San Jose, in collaboration with developmental psychology researchers at UC Santa Cruz (UCSC) and science and education staff of the UC Berkeley Museum of Paleontology (UCMP), is conducting a 48-month long project that focuses on children’s use of evidence to construct scientific explanations. Key deliverables are: a 2,300 square-foot paleontology exhibit with an Evidence Central area; three “evidence hubs” at the Children’s Museum of San Jose; an educational website developed by UCMP; research on children’s use of evidence conducted by UCSC; a “state of the children’s museum field” study on varieties of perspectives on “science” and “evidence;” and professional development experiences for staff at children’s museums. Additional partners include the children’s museums in Austin, TX, Madison, WI, and Providence, RI and local Vietnamese and Latino organizations in the museum’s neighborhood.

Funding for NSF’s AISL program has hovered between \$61 million and \$65.8 million since FY 2003. For FY 2013, NSF requested \$47.8 million, a \$13.58 million reduction from the FY 2012 estimated level of \$61.4 million.

National Oceanic and Atmospheric Administration

Since 2005, NOAA’s Office of Education has helped advance public environmental literacy and STEM learning through the Environmental Literacy Grants (ELG) Program, a competitive grant program that supports formal and informal education projects implemented on regional to national scales. The ELG Program’s primary mission is to increase the understanding and use of environmental information to promote stewardship and increase informed decision making by U.S. educators, students, and the public, which directly contributes to NOAA’s mission. The ELG Program is the longest standing and most comprehensive national grants program focused on environmental literacy, and through this focus, makes a distinctive contribution to STEM education. To date, 80 competitive awards have been made, supporting a wide range of projects including teacher training, experiential learning for youth and families, and the development of media products and public opinion research. Demand for these awards is very high, and the agency has been able to fund only 13% of the full applications received. In FY 2011-12, 216 pre-proposals and 104 full applications were reviewed and 8 new awards were made.

In 2010, NOAA provided funding to help the Nurture Nature Center (NNC) (Easton, PA) install the Science on a Sphere spherical display system and develop a new SOS module about climate and flooding. Working with the Maryland Science Center (Baltimore), the Da Vinci Science Center (Allentown, PA), and science advisers from NOAA and research universities, NNC will use existing SOS datasets, as well as new data formats, to create a docent-guided program that explains the connections between climate patterns and flooding. The Flood Forums: Education to Action program will engage audiences in deliberative forum programming to promote public understanding of the atmospheric, oceanic, and other climatic factors affecting flooding in some regional communities.

Over the last two fiscal years, the NOAA Education Program Base has received \$24.95 million (FY 2011 spending plan) and \$25.09 million (FY 2012 estimated), while Competitive Education Grants saw \$8.04 million in funding (estimated) in FY 2012. For FY 2013,

NOAA proposed cutting \$6.3 million from its Education Program Base, which included a termination of its Competitive Education Grants/Environmental Literacy Grants Program.

National Aeronautics and Space Administration

NASA's education programs inspire interest in STEM among America's youth and have a positive impact on the number of students who are proficient in STEM and choose to pursue careers in STEM fields. Through the Competitive Program for Science Museums, Planetariums and NASA Visitor Centers Plus Other Opportunities—offered through the STEM Education and Accountability program—NASA's Office of Education solicits proposals for uniquely NASA education or research engagement projects, exhibits and/or partnerships with K-12 schools to support inquiry- or experiential-based activities led by informal education institutions that feature NASA missions, science, engineering, explorations, or technologies. The current solicitation seeks projects featuring NASA-themed content in space exploration, aeronautics, space science, Earth science, or microgravity, or a combination of these topics to support NASA education outcomes.

In 2009, NASA's CP4SMP+ provided the Museum of Science and Industry (Tampa, FL) with funding to create "Mission LEAP: Lunar Expedition for Astronaut Pioneers," a simulated prototypical lunar colony outpost where the LEAP pioneer astronauts live on the moon and evaluate NASA's competing design strategies for refueling stations, transport centers, living quarters, asset stowage, mining operations and sustaining life there and beyond. LEAP is an innovative hands-on immersive mixed reality exhibition incorporating challenging STEM content, cooperative learning for problem solving, decision-making, team building and scientific inquiry skills in lunar and planetary surface systems.

NASA's STEM Education and Accountability projects received \$50 million in funding (estimated) for FY 2012. For FY 2013, NASA proposes \$37 million, a \$13 million reduction; no FY 2013 funding was proposed for CP4SMP+.

Conclusion

While I appreciate the budget constraints facing the Subcommittee, I urge you to recognize the key STEM education offerings provided by science centers and museums in your communities—and the integral related federal support offered by NSF, NOAA, and NASA—by: (1) including report language that will ensure NSF returns the focus of its AISL program towards supporting public engagement in science; (2) restoring funding for the AISL program to its FY 2012 estimated funding level; (3) rejecting the proposed termination of NOAA's Competitive Education Grant Program and restoring the NOAA Education Program Base and the Competitive Education Grants/Environmental Literacy grant programs to their FY 2012 estimated funding levels; and (4) providing funding for the Competitive Program for Science Museums, Planetariums and NASA Visitor Centers Plus Other Opportunities and rejecting proposed cuts to NASA's STEM Education and Accountability program by providing the FY 2012 funding level.

Thank you once again for your strong support for America's science centers and museums—and for the opportunity to present these views. I would be happy to respond to any questions or provide additional information as needed by the Subcommittee.

**Jim Maddy, President and CEO
Association of Zoos and Aquariums**

Testimony – House Subcommittee on Commerce, Justice, Science, and Related Agencies

Thank you Chairman Wolf and Ranking Member Fattah for allowing me to testify on behalf of the nation's 211 U.S. accredited zoos and aquariums. Specifically, I want to express my support for the inclusion of \$3.981 million for the John H. Prescott Marine Mammal Rescue Assistance Grant Program and \$2,500,000 for the NOAA Ocean Education Grants Program in the FY2014 Commerce, Justice, Science, and Related Agencies appropriations bill.

Founded in 1924, the Association of Zoos and Aquariums (AZA) is a nonprofit 501c(3) organization dedicated to the advancement of zoos and aquariums in the areas of conservation, education, science, and recreation. AZA-accredited zoos and aquariums annually see more than 182 million visitors, collectively generate more than \$16 billion in annual economic activity, and support more than 142,000 jobs across the country. Over the last five years, AZA-accredited institutions supported more than 4,000 field conservation and research projects with \$160,000,000 annually in more than 100 countries. In the last 10 years, accredited zoos and aquariums formally trained more than 400,000 teachers, supporting science curricula with effective teaching materials and hands-on opportunities. School field trips annually connect more than 12,000,000 students with the natural world.

During the past twenty years AZA-accredited zoos and aquariums have rescued and rehabilitated more than 1,800 marine animals including stranded dolphins, whales, sea lions, seals, sea otters, sea turtles, and manatees. More than 1,750 (97%) of these animals have been successfully released back into their natural habitat. While the nations' accredited zoos and aquariums support wildlife rehabilitation through their ongoing animal rescue programs, these institutions are sometimes involved in addressing natural and manmade disasters such as the 2010 Deepwater Horizon Gulf oil spill. For example, following the oil spill, accredited zoos and aquariums around the country offered assistance by pledging the services of 200 animal care professionals and donating supplies, vehicles, and other resources to assist in the wildlife rescue efforts.

The John H. Prescott Marine Mammal Rescue Assistance Grant Program provides grants or cooperative agreements to eligible stranding network participants for the recovery and treatment (i.e., rehabilitation) of stranded marine mammals; data collection from living or dead stranded marine mammals; and, facility upgrades, operation costs, and staffing needs directly related to the recovery and treatment of stranded marine mammals and collection of data from living or dead stranded marine mammals. Eligible applicants are currently active, authorized participants, including AZA-accredited zoos and aquariums, or researchers in the National Marine Mammal Stranding Network.

Without the Prescott grant program, NOAA would have to rely on private organizations as it coordinates the response to marine mammals in distress; determines disease, injury and potential cause(s) of death; and supports emergency response for marine mammals during oil

spills, outbreaks of diseases, and unusual mortality events. Network partners may not have the funds or the ability to respond to some stranding events, leaving animals at risk for prolonged exposure and likely death. Without funding for this program the critical ability to monitor marine mammal health trends, collect scientific data, and perform analysis would also be diminished. Information about the causes of marine mammal strandings is useful to the public because marine mammals can serve as an indicator of ocean health, giving insight into larger environmental issues that also have implications for human health and welfare.

At the same time that AZA-accredited zoos and aquariums are working with federal partners to conserve ocean wildlife, they also are providing essential learning opportunities, particularly about science, for schoolchildren in formal and informal settings. Increasing access to formal and informal science education opportunities has never been more important. Studies have shown that American schoolchildren are lagging behind their international peers in certain subjects including science and math.

The NOAA Ocean Education Grants Program brings students closer to science by providing them with the opportunity to learn firsthand about our world's marine resources. Through this grant program, aquariums work closely with federal, state, and local partners on projects with long-lasting benefits not only for the students but their communities as well. For example, previous projects funded by NOAA Ocean Education Grants at AZA aquariums have focused on establishing a regional network of summer camp programs grounded in ocean science, enhancing teen conservation leadership programs, and conserving and managing coastal and marine resources to meet our nation's economic, social and environmental needs. As schools face increased budgetary pressures, these types of education programs at aquariums will become even more important in ensuring that American schoolchildren receive the necessary foundation in science education that they will need to be competitive in the 21st century global economy.

AZA-accredited zoos and aquariums are essential partners at the federal, state, and local levels to improve education for schoolchildren and ensure that current and future generations will be good stewards of the world's oceans. Therefore, I urge you to include \$3.981 million for the John H. Prescott Marine Mammal Rescue Assistance Grant Program and \$2,500,000 for the NOAA Ocean Education Grants Program in the FY2014 Commerce, Justice, Science, and Related Agencies appropriations bill.

Thank you.

450 Midland Street
Little Rock, Arkansas 72205

March 21, 2013

Sent Electronically

To: U.S. House Committee on Appropriations
Subcommittee on Commerce, Justice Science and
Related Agencies

REQUEST: RE: 2014 Budget of Department of Justice/Civil Rights Division – *ADA/Olmstead*
Enforcement Programs

Please do not fund Programs and Policies that Promote Deinstitutionalization of Persons
with Severe Forms of Cognitive-Developmental Disabilities

AMOUNT OF FUNDING INVOLVED: UNKNOWN

Ladies and Gentlemen:

Thank you for this opportunity to provide information to the House Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies. This letter is a request that Congress stop funding federal programs which use public funds to achieve dangerous public policies of deinstitutionalization of persons with severe forms of cognitive-developmental disabilities.

I am the mother and co-guardian of an adult son, aged 44, who from birth has lived with the effects of severe brain injuries. John is a large, mobile and nonverbal man who functions on the level of a young toddler and who has slight or little awareness of danger. For many years our son's home has been a state-operated congregate care program, a Medicaid – certified intermediate care facility for persons with mental retardation (ICF/MR).

As Public Affairs Chairman, I represent Families and Friends of Care Facility Residents (FF/CFR), Arkansas' parent-guardian association. FF/CFR is an all-volunteer organization; we employ no lobbyist. I am glad to have this opportunity to communicate.

The following are examples of how government dollars are spent in the wrong way by the Department of Justice:

Civil Right Division/Department of Justice – ADA and Olmstead Enforcement Programs – federal programs which force vulnerable persons from their safe institutional homes

The aggressive actions of Department of Justice - Civil Rights Division in carrying out its "ADA-Olmstead Enforcement" programs to achieve deinstitutionalization of the nation's vulnerable population with profound forms of developmental disabilities should not be funded. Under the guise of protecting civil rights of persons who have little or no awareness of danger and who can communicate only with the greatest difficulty, DOJ-Civil Rights Division's Olmstead/ADA/Integration-Mandate programs aim to force vulnerable persons from safe licensed institutional homes. DOJ lawsuits or the threat of lawsuits have

discouraged states from continuing to provide institutional care for its defenseless citizens with lifelong profound cognitive – developmental disabilities.

Department of Justice - Civil Rights Division brought such an investigation and federal lawsuit in my state of Arkansas against the Conway Human Development Center. DOJ lost the Arkansas lawsuit (June, 2011) but our state was forced to spend millions of dollars to defend its center which was in compliance with Medicaid certification and licensure requirements and despite no residents or their family members joining DOJ in its allegations of civil rights violations. In the Arkansas case, Department of Justice – a federal entity – devoted substantial resources for expert witnesses and teams of attorneys to bring the lawsuit against an Arkansas congregate care program funded by another federal entity, DHHS - CMS. What a waste of public funds!

Please let me know if I may provide additional information. Thank you for your public service. Thank you for your attention and consideration.

Very truly yours,

/s/ Carole L. Sherman
carolelsherman@sbcglobal.net

Cc: HON Mike Beebe, Governor
Arkansas Congressional Delegation
Families & Friends of Care Facility Residents (Arkansas)
DDS Board (Arkansas)



For a thriving New England

CLF Massachusetts 62 Summer Street
Boston MA 02110
P: 617.350.0990
F: 617.350.4030
www.clf.org

March 20, 2013

**SUBMITTED TESTIMONY OF
SEAN COSGROVE
DIRECTOR OF CAMPAIGNS
CONSERVATION LAW FOUNDATION**

**FISCAL YEAR 2014 APPROPRIATIONS
HOUSE COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON COMMERCE, JUSTICE,
SCIENCE AND RELATED AGENCIES**

Representative Frank Wolf, Chairman
Commerce, Justice State Appropriations Subcommittee
House of Representatives
Washington, DC 20515

Dear Chairman Wolf:

The Conservation Law Foundation (CLF) protects New England's environment for the benefit of all people. We use the law, science and the market to create solutions that preserve our natural resources, build healthy communities, and sustain a vibrant economy. CLF respectfully requests that the Commerce, Justice, State Appropriations Subcommittee support the following funding levels for the Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) for FY2014:

- NOAA; Regional Ocean Partnership Grants Program; \$10 million
- NOAA; Fisheries Habitat Restoration: Community-based Restoration Program; \$28 million
- NOAA; Estuary Restoration Program; \$1.5 million

Regional Ocean Partnership Grant Program

The Regional Ocean Partnership (ROP) Grants Program provides competitively awarded funds to regional priorities for ocean and coastal management and science, ensuring that ocean management is a state-driven process where priorities are determined by actual, on-the-ground needs. Regional approaches continue to be the most effective and efficient way to address ocean



management challenges. Every coastal governor, except for Alaska, has come together voluntarily to establish Regional Ocean Partnerships that connect state and federal agencies, tribes, local governments, and stakeholders to tackle ocean and coastal management issues of common concern, such as siting offshore energy, habitat restoration, coastal storm mitigation and marine debris. While the priorities, structures, and methods of each partnership may differ to suit the needs of each region, they are collectively working towards an improved ocean environment and a stronger ocean and coastal economy. Through these grant funds, ROPs leverage federal agencies' scientific research and data collection capacity by linking their activities with federal programs. Regional Ocean Partnerships are already producing on-the-ground results that benefit both the economy and the environment, including cutting edge scientific research, monitoring and practical tools like maps and surveys. We urge that the committee support our request for \$10 million for the NOAA Regional Ocean Partnership Grants Program.

NOAA Fisheries Habitat Restoration Program: Community-Based Restoration Program

NOAA's Fisheries Habitat Restoration program, largely comprised of the Community-based Restoration Program (CBRP), accomplishes on-the-ground projects to restore the nation's coastal, marine, and migratory fish habitat. The program provides technical expertise – including engineering, construction, and monitoring – as well as funding to regional and national partners, and directly to local communities to carry out projects such as marsh and wetlands restoration, small dam removals, and hydrologic re-connections of tidal systems, all of which protect a variety of threatened and/or endangered species, provide healthy outdoor recreational opportunities, and help buffer coastal communities from the threat of erosion and coastal storms. Federal investments in restoration provide long-lasting benefits to local communities and economies.

NOAA's Community-based Restoration Program provides funding through competitively-awarded partnerships. To date, the program has been highly successful at improving the health of coastal habitats across the nation, benefiting both the environment and the economy through partnerships. By working collaboratively with more than 1,500 organizations, CBRP has funded more than 2,300 small- to mid-scale on-the-ground projects to restore over 97,000 acres of habitat. This work has involved more than 290,000 volunteers in projects, contributing more than 1 million volunteer hours.

CBRP funding accounts for only a very small portion of the total NOAA federal budget but provides dramatic results in coastal communities. The funding for this program is also very cost-effective, as the federal investment is matched by local organizations and are used to leverage significantly more private and local investment in our nation's coasts. Depending on the project, federal funds are leveraged between 3 and 5 times with private, local, and state funds. Maintaining funding for CBRP partnerships that accomplish locally driven restoration and engage communities and citizens is well worth the investment.



The CBRP helps to improve the nation's degraded habitats and create jobs and benefit local economies. NOAA data shows that restoration projects create between 17 and 33 jobs per \$1 million invested.¹ And unlike other sectors, these restoration jobs can't be outsourced and will remain in communities. First there are the immediate local jobs, followed by the significant long-term ecologic and economic benefits. Habitat restoration is critical to sustaining and rebuilding the fish populations needed to support sport fishing opportunities and the commercial fishing industry in the coming years. The resulting healthier habitats strengthen and revitalize America's communities by buffering against storms, preventing erosion, protecting vital infrastructure, eliminating public safety hazards, and providing new recreational opportunities.

Conservation Law Foundation urges your continued support and funding for NOAA's Community-based Restoration Program. We urge that the committee support our request of \$28,000,000 for the Fisheries Habitat Budget line.

NOAA, Estuary Restoration Program

Authorized through the Water Resources Development Act of 2000 and reauthorized by Congress in 2007, the Estuary Restoration Act (ERA) established a comprehensive interagency program for the restoration of the nation's estuaries. The ERA's Estuary Habitat Restoration Council, comprised of the five primary federal restoration agencies (USACE, NOAA, EPA, USFWS, and USDA - NRCS) is leading a coordinated approach to maximize benefits from restoration and address the pressures facing our nation's estuaries. With declining federal resources, this level of coordination has never been more important. As current Council Chair, NOAA is leading efforts through the Estuary Restoration Program, while also maintaining an interagency ERA project database that serves as a useful and cost-effective clearinghouse for all agency restoration information. Maintaining funding for this important program is important for continued progress.

In November 2012, the Estuary Habitat Restoration Council approved the 2012 Estuary Habitat Restoration (EHR) Strategy and five-year action plan. The action plan identifies outcomes and milestones to ensure that restoration efforts are coordinated, evaluated, and tracked across agencies with the goal of ensuring efforts are effective and efficient. Maintaining funding for this important program is important for continued progress.

Restore America's Estuaries urges your continued support of the Estuary Restoration Council and NOAA's **Estuary Restoration Program** and ask that you provide \$1,500,000 in funding for Fiscal Year 2014.

CONCLUSION

¹ Table 1: <http://www.habitat.noaa.gov/about/habitat/habitatconservationjobs.html> (Accessed March 2013); http://www.habitat.noaa.gov/pdf/RAE_Restoration_Jobs.pdf.



Conservation Law Foundation greatly appreciates the support this Subcommittee has provided in the past for these important programs. These programs help to accomplish on-the-ground restoration work and planning for tackling regional priorities and fostering sustainable economic development. Together, these three programs result in major benefits:

- **Jobs** – Coastal habitat restoration projects create between 17-33 jobs per \$1 million invested.
- **More fish** – Productive fisheries management tools work best with habitat protection and restoration.
- **Resiliency** – Restoring coastal wetlands can help knock down storm waves and reduce devastating storm surges before they reach the people and property along the shore.
- **Combined funding and community support** – Community-based restoration projects leverage 3-5 times the federal investment through private matching funds, amplifying the federal investment and impact.

Thank you, Mr. Chairman and we appreciate your taking our requests into consideration as you move forward in the FY2014 appropriations process. We stand ready to work with you and your staff to ensure the health of our Nation's estuaries, coasts and oceans.

**Testimony of
Robert B. Gagosian
President and CEO of the Consortium for Ocean Leadership
Before the House Appropriations Subcommittee on Commerce, Justice and Science
March 21, 2013**

On behalf of the Consortium for Ocean Leadership, I appreciate the opportunity to discuss the FY14 federal science budget for the National Science Foundation (NSF), the National Oceanic and Atmospheric Administration (NOAA) and the National Aeronautics and Space Administration (NASA). Ocean Leadership represents 97 of the nation's leading oceanographic research and education institutions and also manages several ocean research and education programs in the areas of scientific ocean drilling, ocean observing, oil spills and ocean partnerships. Given that our nation suffered a record 99 disasters last year – nearly all of them caused by extreme weather, including Super Storm Sandy – we clearly need to sustain and improve our prediction capabilities to prepare for and mitigate the impacts of future extreme events. Consequently, we respectfully request \$6.3 billion for the NSF Research and Related Accounts; \$1.9 billion for Earth Sciences at NASA; and FY10 levels for extramural research and education programs at NOAA.

NSF Basic Research

Our nation's economic, social and security prospects are reliant upon science and technology to innovate solutions and develop products and services for a rapidly changing world. However, federal funding of research in the physical sciences fell by 54% between 1970 and 1995. Furthermore, society increasingly expects and demands immediate satisfaction and results, which has led to a preference for applied research at the expense of basic research. While applied research is essential, particularly for mission agencies such as NOAA and NASA, basic research at NSF is paramount for ensuring our nation has the intellectual capacity to develop and deal with the next generation of technology needs and challenges. Consequently, we feel the erosion of funding for core basic research programs is short-sighted and is akin to a farmer selling his seed corn. We must find better places to achieve budget savings, as the economic future of our nation is directly related to our investment in basic research.

Ocean and Coastal Observations

Super Storm Sandy was the 11th billion-dollar weather-related disaster in 2012. Taking more than 100 lives and leaving more than \$50 billion in property damages, Sandy's impact on the local environment and communities will be felt for many years. As ocean waters warm and the Gulf Stream slows (due to additional freshwater influx from rapid glacial melt), we expect more significant flooding events along the heavily populated East Coast. The extent of this problem is difficult to accurately quantify as there is a desperate need for better understanding of glacial/ice sheet melt, ice/sea dynamics, and monitoring the extent of freshwater exiting the Arctic to decipher its impact on ocean circulation patterns. Furthermore, the key to better predicting the strength of hurricanes lies in determining the amount of heat in the subsurface ocean – which can only be detected by in-situ measurements. As we gain better prediction, modeling, mapping and computing capabilities, local resource managers require access to improved risk assessment information regarding the physical and socioeconomic vulnerabilities to sea-level rise, saltwater

intrusion and extreme events to develop and protect resilient and sustainable infrastructure systems, such as roads, railways, drinking water/sewage systems and electrical grids. We greatly appreciate the commitment the Committee made this year to begin addressing these needs in the Hurricane Sandy Supplemental Appropriations Bill, and we hope additional support for research and operational ocean and coastal observing systems in NOAA, NASA and NSF can be achieved through the annual appropriations process.

Arctic Science

The Arctic Ocean is of great strategic importance to the nation as it contains tremendous natural resources, is a future trade route, and is a critical driver of the global climate system. The loss of Arctic sea ice will dramatically impact commerce and the national economy through increased access to the Arctic's valuable living and nonliving resources as well as the opening of the Northwest Passage and Northern Sea Route for shipping. An enduring integrated Arctic observing system is essential to monitor air-sea-ice interactions and changing ecosystems and their impacts on marine life and human livelihoods. To succeed, we need to develop and utilize new, autonomous systems and platforms capable of working in harsh environments. The unforgiving Arctic environment also means there will be greater risks associated with oil and gas development; thus requiring research and modeling of oil in and under ice-covered waters as well as evaluating dispersants in Arctic conditions. The lack of natural biota to degrade oil, the presence of ice and the lack of at-sea and shoreline facilities equates to a tremendous challenge should an Arctic spill occur.

Earth Observing Satellites

According to a National Research Council report, the status of the U.S. Earth observing satellite systems "is at great risk." We cannot afford to move forward with a blind eye given changing climate patterns, rising sea-levels and more frequent and intense storms threatening millions of citizens and billions of dollars in infrastructure. However, we desperately need to improve the efficiency and effectiveness of the design, procurement and operation of our Earth observing assets and ensure that technical requirements are managed in accordance with realistic budgets. We also need to develop the technology to support the next generation of satellite constellations that is less expensive and less risky. Finally, we should be aggressively pursuing opportunities to partner with other nations to share data so that we do not have to bear the full cost of these systems.

Science Education

The interdisciplinary nature of oceanography (physics, biology, geology, chemistry, engineering and computational science) requires dedicated training opportunities for the next generation of physical scientists. We believe that the mission agencies should continue to have a significant role in education and training as they are part of the scientific community and in the best position to anticipate the impending technical and scientific challenges facing the next generation of scientists. Furthermore, the passion for the field and subject matter in the mission agencies translates exceptionally well to environmental literacy programs, which are needed more now than ever given that half of U.S. adults do not know how long it takes for the Earth to revolve around the sun.

America is blessed to be a nation surrounded by ocean, which provides a tremendous amount of economic, security and social benefits to Americans living along our coasts as well as those in the interior. We are truly an ocean nation with more than 95% of the nation's commerce traveling through American ports, more than \$100 billion in annual seafood sales and 1.7 million jobs in coastal tourism and recreation. Furthermore, over \$8 trillion worth of oil and gas reserves lay below the oceans, and above them are terawatts of untapped wind and hydrokinetic resources. Current and anticipated changes in ocean chemistry, productivity and sea level will have tremendous regional and national economic impacts. The academic research community is fully-equipped to help develop efficient and effective solutions to enhance our economy and maintain our status as the world's leader in research and innovation.

Mr. Chairman and members of the Subcommittee, I encourage you to continue your long-standing bi-partisan support for science funding in the FY14 budget and into the future.

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California

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 415-762-8270

Illinois

Tim Carpenter
 312-265-2260

Maine

Kim Gore
 207-725-5946

Michigan

K.P. Pelleran
 517-371-3565

Montana

David Curry
 406-558-4732

New York

Jennifer O'Connor
 518-465-5462

Ohio

Cyndy Rees
 614-264-6662

Oregon

Martha Brooks
 503-649-2068

Pennsylvania

Bruce Clash
 717-233-1520

Washington

Laura Wells
 206-664-7110

U.S. House of Representatives

Committee on Appropriations

Subcommittee on Commerce, Justice, Science, and Related Agencies

Hearing on FY 2014 Appropriations

March 21, 2013

Written Testimony of:

Sheriff Lenny Millholland

Winchester, VA.

On Behalf of:

FIGHT CRIME: INVEST IN KIDS

The ensuing testimony requests the following funding for programs within the Department of Justice's Office of Justice Programs:

- *\$80 million for the JJDPa Title II State Formula Grants;*
- *\$65 million—without set-asides—for the JJDPa Title V Local Delinquency Prevention Grants;*
- *\$30 million for the Juvenile Accountability Block Grant;*
- *\$90 million for Youth Mentoring; and*
- *\$80 million for the Second Chance Act.*

Mr. Chairman, Ranking Member, and Members of the Subcommittee on Commerce, Justice, Science, and Related Agencies:

Thank you for the opportunity to submit this testimony. My name is Lenny Millholland and I am the Sheriff in Winchester, Virginia. I have more than 35 years in law enforcement at the local level. I have a Juvenile Detention Center in my jurisdiction and I am a board member of the Northwest Regional Adult Detention Center. In addition, my community has Big Brothers Big Sisters and the Timbrook House providing community-based prevention efforts like mentoring and afterschool programs. I am also a member of Fight Crime: Invest in Kids, a national anti-crime organization of over 5,000 police chiefs, sheriffs, prosecutors, attorneys general, other law enforcement leaders, and victims of violence who have come together to take a hard-nosed look at the research about what really works to keep kids from becoming criminals.

As a Sheriff, I know that there is no substitute for tough law enforcement when it comes to keeping our communities safe. Across the country, law enforcement is busy arresting and prosecuting juvenile offenders, and the most dangerous of these youth are being locked up. The good news is that 60 percent of juveniles coming before a court for their first offense will not return to juvenile court again. Research tells us, however, that punishment alone is not always enough: among second-time offenders age 14 or younger, 77 percent will come back for a third court appearance.

Such high rates of recidivism are troubling. Our country needs to do more, particularly in these challenging economic times, to ensure kids grow up to be productive members of our society. Fortunately, our experiences—and research—show that making targeted investments in kids can help by intervening effectively to prevent recidivism or by keeping them away from crime in the first place. This approach is not only practical for public safety, but fiscally responsible as well. Research shows that these investments save taxpayers far more than they cost. Title II and Title V of the Juvenile Justice and Delinquency Prevention Act (JJDPa), the Juvenile Accountability Block Grant (JABG), Juvenile Mentoring programs, and funding under the Second Chance Act can all provide needed support for such evidence-based prevention and intervention strategies to reduce crime.

Keeping Kids Away From Crime

Getting kids the right start in life and keeping them on track to avoid a life of crime is one of the most effective strategies for improving public safety. The Title V Local Delinquency

Prevention Grants are the only federal funding source under JJDPA dedicated solely to the prevention of youth crime and violence. Communities can use these grants to fund a wide range of prevention programs including after-school activities, mentoring, tutoring, as well as initiatives to prevent school drop-outs, substance abuse, and gang activity. These grants are competitive, and require localities to match at least 50 percent of the grant funds with cash or in-kind contributions. To participate in the program, localities must engage in collaborative, comprehensive planning of needed community-based delinquency prevention efforts.

As mentioned before, Title V grants can fund after-school programs that help at-risk youth avoid criminal activity in the first place. The hours of 3:00pm – 6:00pm are the “prime time for juvenile crime,” and with good reason: 15 million children lack proper adult supervision after school. These are the hours when juvenile crime soars and children are most likely to become victims of crime, be in a car accident, smoke tobacco, drink alcohol, or use drugs. Programs such as Boys & Girls Clubs connect children to caring adults and provide them with constructive activities during these critical hours. These investments have been shown by research to be effective in reducing delinquent behavior. Specifically, a comparison study found that housing projects without Boys & Girls Clubs had 50 percent more vandalism and scored 37 percent worse on drug activity than those served by the programs.

Like after-school programs, high-quality juvenile mentoring programs have been shown to help at-risk youth avoid criminal activity in the first place. For example, a study of Big Brothers Big Sisters found that young people who were randomly assigned to a Big Brother or Big Sister mentor were about half as likely to begin illegal drug use and nearly one-third less likely to hit someone compared to those who were assigned to a waiting list.

Effective Therapeutic Interventions to Reduce Recidivism

In the wake of the recent tragedy in Newtown, Connecticut, an important national discussion on violence prevention is taking place. A clear consensus has formed around the necessity to address the mental health needs of our nation, especially of its youth. Federal juvenile justice funding streams can play a critical role in addressing this need. For example, JJDPA Title II State Formula Grants and the Juvenile Accountability Block Grant (JABG) can fund several proven crime-reducing therapeutic interventions for kids who have begun to travel down the wrong path. One such intervention is Multisystemic Therapy (MST). MST targets kids who are serious juvenile offenders by addressing the multiple factors related to delinquency in their peer, school, neighborhood, and family environments. One study of MST found juvenile offenders who had not received MST were 62 percent more likely to have been arrested for an offense, and more than twice as likely to be arrested for a violent offense. MST also saved the public an average of \$22,000 for every juvenile treated. Another intervention, Functional Family Therapy (FFT), works to engage and motivate youth and their families to change behaviors that often lead to criminal activity. In one evaluation, youth whose families received FFT were found to be half as likely to be re-arrested as those whose families did not. Further, FFT was found to save the public \$35,000 per youth treated.

Effective Reentry Approaches to Reduce Recidivism

Juveniles released from confinement still have their likely ‘prime crime years’ ahead of them, and unsuccessful transitions back into communities result in an alarmingly high recidivism rate of 55-75 percent for juvenile offenders. Effective reentry programs help reduce recidivism rates by providing support and resources to guide ex-offenders through a successful transition back to community life. One effective, research-based program with a strong reentry component is Multidimensional Treatment Foster Care (MTFC). MTFC provides services to youth and their families during and after a youth’s out-of-home placement, ongoing supervision by a program case manager, and frequent contact and coordination of services with the youth’s parole/probation officer, teachers, work supervisors, and other involved adults. In studies, MTFC has been shown to cut juvenile recidivism in half and saves the public an average of \$33,000 for every juvenile treated.

The Second Chance Act grants can support effective reentry efforts, including programs like MTFC. These grants provide assistance to states and localities to develop and implement strategic plans for comprehensive efforts to enable ex-offenders to successfully reenter their communities such as: family reunification, job training, education, housing, and substance abuse and mental health services.

Overwhelming Unmet Needs

Unfortunately, the evidence-based prevention and intervention programs for young people – which we know to be effective in reducing crime – remain woefully underfunded. Significant funding cuts to Title II State Formula Grants, Title V Local Delinquency Prevention grants, and JABG in the years since FY 2002 have only exacerbated this problem. For example, at FY12 funding levels—after carve-outs for non-statutory uses—states did not receive any Title V allocation to support community prevention efforts. In the recent years when money was made available after set-asides, states each received a mere \$34,000-\$38,000—barely enough to fund training for a single prevention effort. As funding levels continue to dwindle, the need for evidence-based prevention and intervention programs remains high. Even if only half of the more than 300,000 juvenile offenders on probation and half of the 150,000 juvenile offenders in out-of-home placement were eligible for evidence-based intervention programs, the number of young offenders who could benefit from evidenced-based approaches would still be many times the total currently being served by MST, MTFC, and FFT. Juvenile Mentoring funds also fall far short of meeting the needs of at-risk and troubled youth.

It is important in these challenging economic times that Congress prioritizes investments in what works to reduce crime, improve public safety and provide a significant rate of return to the taxpayer. Therefore, I urge you to include the following investments in your FY 2014 Commerce, Justice, Science and Related Agencies’ spending measure:

- **At least \$80 million for the Juvenile Justice and Delinquency Prevention (JJDP) Title II State Formula Grants;**

- **At least \$65 million—without set-asides— for the JJDP Title V Local Delinquency Prevention Grants;**
- **At least \$30 million for the Juvenile Accountability Block Grant (JABG);**
- **At least \$90 million for Juvenile Mentoring Grants; and**
- **At least \$80 million for the Second Chance Act.**

Law enforcement leaders' commitment to putting dangerous criminals in jail must be matched by a commitment from Congress to protect investments in kids that help prevent them from becoming career criminals. On behalf of my fellow law enforcement leaders around the country who, like me, are members of FIGHT CRIME: INVEST IN KIDS, I urge you to stand with us to improve our public safety and save taxpayer dollars by prioritizing these proven, fiscally responsible crime-prevention strategies.

Thank you again for the opportunity to submit this testimony.



Testimony of the
Geological Society of America
 Kasey White
 Director for Geoscience Policy
 Regarding the
National Science Foundation
 and
National Aeronautics and Space Administration
 FY 2014 Appropriation
 to the
U.S. House of Representatives
 Committee on Appropriations
 Subcommittee on Commerce, Science, Justice, and Related Agencies
 March 21, 2013

Summary

The Geological Society of America (GSA) supports strong and sustained investments in earth science research and education at the National Science Foundation (NSF) and National Aeronautics and Space Administration (NASA). These investments are necessary to address such issues as energy resources, water resources, climate change, waste management, and natural hazards and train the next generation of earth science professionals. GSA urges Congress to provide the National Science Foundation (NSF) at least \$7.033 billion in fiscal year 2014, which is the same amount appropriated in fiscal year 2012. Although this funding level would fall well short of the vision to double the NSF budget as specified in the America COMPETES Reauthorization Act of 2010 and levels supported by both the House and Senate in FY2013, it would allow NSF to return to pre-sequestration levels. GSA also supports sustained funding for earth science research at NASA.

GSA would like to thank the House Appropriations Subcommittee on Commerce, Science, Justice, and Related Activities for its leadership in increasing investments in the National Science Foundation, NASA, and other science agencies and its recognition of the critical role they play in our nation's future.

The Geological Society of America, founded in 1888, is a scientific society with over 25,000 members from academia, government, and industry in all 50 states and more than 90 countries. Through its meetings, publications, and programs, GSA enhances the professional growth of its members and promotes the geosciences in the service of humankind.

SCIENCE ■ STEWARDSHIP ■ SERVICE

3300 Penrose Place, P.O. Box 9140, Boulder, Colorado 80301-9140 USA ■ Tel 303.357.1000, Fax 303.357.1070 ■
www.geosociety.org

As Congress recognized in the America COMPETES Act and its 2010 reauthorization, science and technology are engines of economic prosperity, environmental quality, and national security. In 2010, the National Academies issued a report, *Above the Gathering Storm, Revisited*, that speaks to the need to invest in research, even in a tight fiscal environment:

“It would be impossible not to recognize the great difficulty of carrying out the *Gathering Storm* recommendations, such as doubling the research budget, in today’s fiscal environment...with worthy demand after worthy demand confronting budgetary realities. However, it is emphasized that actions such as doubling the research budget are investments that will need to be made if the nation is to maintain the economic strength to provide for its citizens healthcare, social security, national security, and more.”

Likewise, the National Commission on Fiscal Responsibility and Reform, headed by Erskine Bowles and Alan Simpson, said:

“[W]e must invest in education, infrastructure, and high-value research and development to help our economy grow, keep us globally competitive, and make it easier for businesses to create jobs.”

National Science Foundation

While the National Science Foundation (NSF) had been on a path to double its budget, NSF will likely see cuts in FY 2013. The Geological Society of America is very concerned about the impact of sequestration cuts on NSF and our nation’s future innovations and innovators. The cuts from the sequester are estimated to cause NSF to fund 1,000 fewer proposals this fiscal year, affecting 12,000 scientists, educators, technicians, and students. NASA, too, has announced it will decrease the number of scientific proposals it will be able to fund. We are greatly concerned about areas of investigation that will not be explored as well as the impact on the next generation of scientists. As proposal rates decrease, young scientists will likely be most affected, leading them to consider careers outside of the science and causing the loss of our next general of scientists and educators.

GSA urges Congress to provide the National Science Foundation (NSF) at least \$7.033 billion in fiscal year 2014, which is the same amount appropriated in fiscal year 2012. Although this funding level would fall well short of the vision to double the NSF budget, it would allow NSF to return to pre-sequestration levels. We believe this investment in NSF is necessary for America’s future economic and science and technology leadership, both through discoveries that are made through this investment and through the talent developed through NSF programs

The earth sciences are critical components of the overall science and technology enterprise and NSF investment. Earth science research provides knowledge and data essential for developing policies, legislation, and regulations regarding land, mineral, energy, and water resources at all levels of government.

NSF’s Earth Sciences Division regularly receives a large number of exciting research proposals that are highly rated for both their scientific merit and their broader impacts, but many

meritorious projects have not been funded due to budget constraints. Sequestration and budget cuts increase the number of proposals in this category.

It is critically important to increase NSF's investments in earth science research and education to meet challenges posed by human interactions with Earth's natural system and to help sustain these natural systems and the economy. Increased investments in NSF's earth science portfolio are necessary to address such issues as natural hazards, energy, water resources, climate change, and education. Specific needs include:

- Recent natural disasters provide unmistakable evidence that the United States remains vulnerable to staggering losses. 2011 was a record year for U.S. natural disasters, with 12 separate billion dollar weather/climate disasters. An improved scientific understanding of geologic hazards will reduce future losses through better forecasts of their occurrence and magnitude, and allow for better planning and mitigation in these areas. We urge Congress to support NSF investments in fundamental earth science research that stimulate basic understanding and innovations in natural hazards monitoring and warning systems.
- Energy and mineral resources are the foundation of many technologies and economies. The Division of Earth Sciences supports proposals for research geared toward improving the understanding of the structure, composition, and evolution of the Earth and the processes that govern the formation and behavior of the Earth's materials. This research contributes to a better understanding of the natural distribution of mineral and energy resources for future exploration. In particular, GSA encourages support for research on rare earth materials, for which our nation is dependent on foreign sources.
- The devastating droughts in 2012 reminded us of our dependence on water. Greater scientific understanding of surface water and groundwater is necessary to ensure adequate and safe water resources both now and for the future. NSF's research addresses major gaps in our understanding of water availability, quality, and dynamics, and the impact of both a changing and variable climate, and human activity, on the water system.
- Forecasting the outcomes of human interactions with Earth's natural systems, including climate change, is limited by an incomplete understanding of geologic and environmental processes. Improved understanding of these processes in Earth's deep-time history can increase confidence in the ability to predict future states and enhance the prospects for mitigating or reversing adverse impacts to the planet and its inhabitants.
- Research in earth science and education is fundamental to training and educating the next generation of earth science professionals. A recent study *Status of the Geoscience Workforce 2011* by the American Geosciences Institute found:

"Aggregate job projections are expected to increase by 35 percent between 2008 and 2018.... By 2030, the unmet demand for geoscientists in the petroleum industry will be approximately 13,000 workers for the conservative demand industry estimate."

Increased NSF investments in earth science education at all levels are needed because knowledge of the earth sciences is essential to science literacy and to meeting the environmental and resource challenges of the twenty-first century. NSF's Education and Human Resources Division researches and improves the way we teach science and provide research and fellowship opportunities for students to encourage them to continue in the sciences.

National Aeronautics and Space Administration

GSA supports planetary exploration to advance research concerning the evolution of Earth; to deepen and expand human understanding of our place in the universe; to reinforce science, technology, engineering and math (STEM) education and effective training of the next generation of scientists; to increase U.S. competitiveness in science and technology development; and to enhance the quality of life through technological innovation.

Planetary missions at NASA are designed to collect data to better understand the history and workings of the entire solar system, to gain insight into the formation and evolution of Earth and the other planets, to understand how life began on Earth, and to determine whether extraterrestrial habitable environments and life forms exist (or ever did exist) elsewhere in the solar system or beyond. To support these missions, planetary scientists engage in both terrestrial field studies and Earth observation to examine geologic features and processes that are common on other planets, such as impact structures, volcanic constructs, tectonic structures, and glacial and fluvial deposits and landforms. Geochemical studies include investigations of extraterrestrial materials now on Earth, including lunar samples, tens of thousands of meteorites, cosmic dust particles, and, most recently, particles returned from comets and asteroids.

Exploration of other planets in the solar system requires major national and international initiatives, significant funding levels, and long timelines for mission planning and collaborative research. For scientists, the funding cycle is much shorter than typical mission cycles, and in particular, graduate student and career-development timelines are much shorter than mission timeframes. Therefore, the growth and continued development of a robust workforce capable of conducting complex space missions and analyzing the scientific data returned from such missions does not depend on individual missions as much as it depends upon a consistent, sustained program that educates and develops planetary scientists.

GSA supports NASA earth observing systems and their research into our planet. By providing adequate resources to maintain current and develop next-generation satellites, the nation will continue to have access to data that is used for a range of activities, including climate and weather forecasting used by diverse stakeholders ranging from farmers to water managers.

For additional information or to learn more about the Geological Society of America – including GSA Position Statements on water resources, planetary research, energy and mineral resources, natural hazards, climate change, and public investment in earth science research – please visit www.geosociety.org or contact GSA Director for Geoscience Policy Kasey White at kwhite@geosociety.org or 202.669.0466.

GREAT LAKES INDIAN FISH AND WILDLIFE COMMISSION

P. O. Box 9 • Odanah, WI 54861 • 715/682-6619 • FAX 715/682-9294

MEMBER TRIBES

MICHIGAN

Bay Mills Community
Keweenaw Bay Community
Lac Vieux Desert Band

WISCONSIN

Bad River Band
Red Cliff Band
Sokaogon Chippewa
Lac Courte Oreilles Band
Lac du Flambeau Band
St. Croix Chippewa

MINNESOTA

Fond du Lac Band
Mille Lacs Band

FY 2014 TESTIMONY

HOUSE COMMITTEE ON APPROPRIATIONS

SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE AND RELATED AGENCIES

BY

JAMES E. ZORN, EXECUTIVE ADMINISTRATOR

GREAT LAKES INDIAN FISH AND WILDLIFE COMMISSION (GLIFWC)

AGENCY INVOLVED: Department of Justice

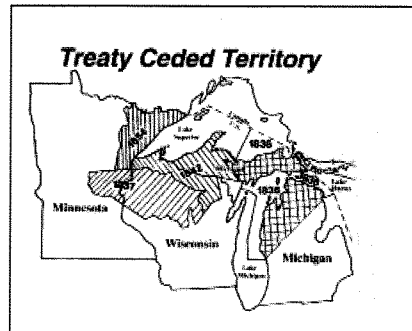
PROGRAM INVOLVED: COPS Tribal Resources Grant and Universal Hiring Programs

SUMMARY OF GLIFWC'S FY 2014 TESTIMONY: GLIFWC appreciates the \$35 million provided in FY 2012 and proposed by the Administration in FY 2013 for the Tribal Resources Grant Program (TRGP), as well as the decision to allow applicants to apply for indirect costs in FY 2013. This program provides vital training and equipment for GLIFWC Conservation Enforcement Officers. The TRGP has enabled GLIFWC to solidify its communications, training, and equipment requirements, essential elements that help ensure the safety of GLIFWC officers and their role in the proper functioning of interjurisdictional emergency mutual assistance networks in the treaty ceded territories.

CEDED TERRITORY TREATY RIGHTS AND

GLIFWC'S ROLE: GLIFWC was established in 1984 as a "tribal organization" within the meaning of the Indian Self-Determination Act (PL 93-638). It exercises authority delegated by its member tribes to implement federal court orders and various interjurisdictional agreements related to their treaty rights. GLIFWC assists its member tribes in:

- securing and implementing treaty guaranteed rights to hunt, fish, and gather in Chippewa treaty ceded territories; and
- cooperatively managing and protecting ceded territory natural resources and their habitats.



For over 25 years, Congress and various Administrations have funded GLIFWC through the BIA, Department of Justice and other agencies to meet specific federal obligations under: a) a

March 21, 2013

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number of US/Chippewa treaties; b) the federal trust responsibility; c) the Indian Self-Determination Act, the Clean Water Act, and other legislation; and d) various court decisions, including a 1999 US Supreme Court case, affirming the treaty rights of GLIFWC's member tribes. GLIFWC serves as a cost efficient agency to conserve natural resources, to effectively regulate harvests of natural resources shared among treaty signatory tribes, to develop cooperative partnerships with other government agencies, educational institutions, and non-governmental organizations, and to work with its member tribes to protect and conserve ceded territory natural resources.

Under the direction of its member tribes, GLIFWC operates a ceded territory hunting, fishing, and gathering rights protection/implementation program through its staff of biologists, scientists, technicians, conservation enforcement officers, and public information specialists.

COMMUNITY-BASED POLICING: GLIFWC's officers carry out their duties through a community-based policing program. The underlying premise is that effective detection and deterrence of illegal activities, as well as education of the regulated constituents, are best accomplished if the officers work within tribal communities that they primarily serve. The officers are based in reservation communities of the following member tribes: in Wisconsin – Bad River, Lac Courte Oreilles, Lac du Flambeau, Red Cliff, Sokaogon Chippewa (Mole Lake) and St. Croix; in Minnesota – Mille Lacs; and in Michigan – Bay Mills, Keweenaw Bay and Lac Vieux Desert. To develop mutual trust between GLIFWC officers and tribal communities, officers provide outdoor skills workshops and safety classes (hunter, boater, snowmobile, ATV) to 300 tribal youth in grades 4-8 annually. Recently GLIFWC officers worked to support drug and alcohol prevention efforts in the Lac du Flambeau school system by sponsoring a snowshoe making workshop for tribal youth.

INTERACTION WITH LAW ENFORCEMENT AGENCIES: GLIFWC's officers are integral members of regional emergency services networks in Minnesota, Michigan and Wisconsin. They not only enforce the tribes' conservation codes, but are fully certified officers who work cooperatively with surrounding authorities when they detect violations of state or federal criminal and conservation laws. These partnerships evolved from the inter-governmental cooperation required to combat the violence experienced during the early implementation of treaty rights in Wisconsin. As time passed, GLIFWC's professional officers continued to provide a bridge between local law enforcement and many rural Indian communities.

GLIFWC remains at this forefront, using DOJ funding to develop interjurisdictional legal training attended by GLIFWC officers, tribal police and conservation officers, tribal judges, tribal and county prosecutors, and state and federal agency law enforcement staff. DOJ funding has also enabled GLIFWC to certify its officers as medical emergency first responders trained in the use of defibrillators, and to train them in search and rescue, particularly in cold water rescue techniques. When a crime is in progress or emergencies occur, local, state, and federal law enforcement agencies look to GLIFWC's officers as part of the mutual assistance networks of the ceded territories. In fact, the role of GLIFWC's officers in these networks was further legitimized in 2007 by the passage of Wisconsin Act 27. This law affords GLIFWC wardens the same statutory safeguards and protections that are afforded to their DNR counterparts. GLIFWC wardens will now have access to the criminal history database and other information to identify

whom they are encountering in the field so that they can determine whether they are about to face a fugitive or some other dangerous individual.

DOJ has acknowledged that, “[t]he officer-to-population ratio still remains lower on Indian reservations than in other jurisdictions across the country. . . . tribal law enforcement has a unique challenge of patrolling large areas of sparsely populated land” (DOJ 2011 Budget Summary). GLIFWC’s participation in mutual assistance networks located throughout a 60,000 square mile region directly addresses this problem in an effective and cost efficient manner.

GLIFWC PROGRAMS FUNDED BY DOJ: GLIFWC recognizes that adequate communications, training, and equipment are essential both for the safety of its officers and for the role that GLIFWC’s officers play in the proper functioning of interjurisdictional emergency mutual assistance networks in the ceded territories. GLIFWC’s COPS grants have provided a critical foundation for achieving these goals. Significant accomplishments with Tribal Resources Grant Program funds include:

Increased Versatility and Homeland Security: With FY 2011 COPS funding, GLIFWC obtained a 20-foot airboat to expand patrol capabilities and coverage on Lake Superior. This boat provides greater versatility to respond to incidents at times of the year when ice conditions do not allow access by other craft. In 2008, GLIFWC used COPS funding to purchase an incident command center trailer that will be used to provide a base for enforcement activities and to improve response to incidents that trigger joint law enforcement actions.

Emergency Response Equipment and Training: Each GLIFWC officer has completed and maintains certification as a First Responder and in the use of life saving portable defibrillators. Since 2003, GLIFWC officers have carried First Responder kits and portable defibrillators during their patrol of around 275,000 miles per year throughout the ceded territories. In remote, rural areas the ability of GLIFWC officers to respond to emergencies provides critical support of mutual aid agreements with federal, state, and local law enforcement agencies.

Ice Rescue Capabilities: Each GLIFWC officer maintains certification in ice rescue techniques and was provided a Coast Guard approved ice rescue suit. In addition, each of the patrol areas was provided a snowmobile and an ice rescue sled to participate in interagency ice rescue operations with county sheriffs departments and local fire departments.

Wilderness Search and Rescue Capabilities: Each GLIFWC officer completed Wilderness Search and Rescue training. The COPS Tribal Resources Grant Program also enabled GLIFWC to replace a number of vehicles that were purchased over a decade ago, including 10 ATV’s and 16 patrol boats and the GPS navigation system on its 31-foot Lake Superior Patrol Boat. These vehicles are used for field patrol, cooperative law enforcement activities, and emergency response in the 1836, 1837 and 1842 ceded territories. GLIFWC officers also utilize these vehicles for boater, ATV, and snowmobile safety classes taught on reservations as part of the Commission’s Community Policing Strategy, providing critical outreach to tribal youth.

Hire, Train and Equip Three Additional Officers: Funding was contracted in FY 2003 to provide three additional officers to ensure tribes are able to meet obligations to both enforce off-

reservation conservation codes and effectively participate in the myriad of mutual assistance networks located throughout a vast region covering 60,000 square miles. As required by the program, GLIFWC has absorbed the salary costs related to sustaining those positions, however COPS funding is needed now more than ever to sustain the other components of the program related to training and equipment.

Consistent with numerous other federal court rulings on the Chippewa treaties, the United States Supreme Court re-affirmed the existence of the Chippewa's treaty-guaranteed usufructuary rights in *Minnesota v. Mille Lacs Band*, 526 U.S. 172 (1999). As tribes have re-affirmed rights to harvest resources in the 1837 ceded territory of Minnesota, workloads have increased. In addition, a consent decree signed in 2007 will govern the exercise of treaty rights in inland portions of the 1836 ceded territory in Michigan, where one of GLIFWC's member tribes exercises treaty rights.

But for GLIFWC's COPS grants, this expanded workload, combined with staff shortages would have limited GLIFWC's effective participation in regional emergency services networks in Minnesota, Michigan and Wisconsin. The effectiveness of these mutual assistance networks is more critical than ever given: 1) national homeland security concerns, 2) state and local governmental fiscal shortfalls, 3) staffing shortages experienced by local police, fire, and ambulance departments due to the call up of National Guard and military reserve units, and 4) the need to cooperatively combat the spread of methamphetamine production in rural areas patrolled by GLIFWC conservation officers. Examples of the types of assistance provided by GLIFWC officers follow:

- With federal, state and local law enforcement partners, GLIFWC has provided assistance in efforts to intercede in cannabis cultivation efforts. Over the past three years, GLIFWC wardens have participated in three raids of cannabis cultivation operations on public land within treaty ceded territories. GLIFWC officers in one instance discovered the growing operation, and in another provided surveillance of the site. These operations often take place in rural, heavily-wooded areas that pose challenges to law enforcement personnel. GLIFWC has used DOJ COPS funding to provide tactical training to its wardens to enhance their effectiveness in these environments and so that they can better assist other agencies in dealing with these challenges.
- As trained first responders, GLIFWC officers routinely respond to, and often are the first to arrive at, snowmobile accidents, heart attacks, hunting accidents, and automobile accidents (throughout the ceded territories) and provide sheriffs departments valuable assistance with natural disasters (e.g. floods in Ashland County and a tornado in Siren, Wisconsin).
- Search and rescue for lost hunters, fishermen, hikers, children, and the elderly (Sawyer, Ashland, Bayfield, Burnett, and Forest Counties in Wisconsin and Baraga, Chippewa, and Gogebic Counties in Michigan).

- Being among the first to arrive on the scene where officers from other agencies have been shot (Bayfield, Burnett, and Polk Counties in Wisconsin) and responding to weapons incidents (Ashland, Bayfield, Burnett, Sawyer, and Vilas Counties in Wisconsin).
- Use of a thermal imaging camera (purchased through the TRGP) to track an individual fleeing the scene of an accident (Sawyer County, Wisconsin).
- Completing snowmobile death investigations in cooperation with other agencies using skills learned through investigation training funded through the TRGP program (Vilas County),
- Organizing and participating in search and rescues of ice fishermen on Lake Superior (Ashland and Bayfield Counties in Wisconsin), Lake Superior boats (Baraga County in Michigan and with the U.S. Coast Guard in other parts of western Lake Superior), and kayakers (Bayfield County in Wisconsin).

In 2013, GLIFWC has applied to the DOJ TRGP program to: 1) provide training to maintain law enforcement, first aid, and emergency rescue certifications, 2) support interagency efforts to control illegal cannabis cultivation operations on public lands within the 1836, 1837 and 1842 Chippewa ceded territories with advanced tactical training, thermal cameras and night vision for GLIFWC Officers, and 3) staff and equip a Safety/Youth Outreach Officer to improve and increase community policing efforts through safety programs (i.e. hunter safety, boater safety, ATV safety, snowmobile safety), outdoor skills workshops, and sponsor a Tribal Youth Camp in conjunction with the USDA Forest Service. TRGP resources will allow GLIFWC conservation officers to conduct essential cooperative conservation, law enforcement, outreach, and emergency response activities. We ask Congress to support the DOJ COPS TRGP program at no less than its proposed FY 2013 level.

TESTIMONY OF

Larry Simpson, Executive Director, GSMFC

On Fiscal Year 2014 Budget
House Committee on Appropriations
Subcommittee on Commerce, Justice, Science and Related Agencies
March 21, 2013

The Gulf States Marine Fisheries Commission (GSMFC) hereby submits the following written testimony for the record on the Fiscal Year 2014 (FY14) Budget.

The three Interstate Marine Fisheries Commissions (GSMFC, ASMFC and PSMFC) and the twenty seven coastal states they collectively represent strongly support \$2.5 million in funding for the Inter Jurisdictional Fisheries Act (IJFA) in FY14 as well as \$32 million for the “Regional Councils and Fisheries Commissions” line items within the National Ocean and Atmospheric Administration’s (NOAA)/National Marine Fisheries Service (NMFS) budget in the Commerce, Science, Justice Appropriations Act for FY14.

IJFA Funding

The President’s Fiscal Year 2013 Budget Request proposed to terminate the IJFA Grants to States program, and it is currently unknown what will be included in the President’s FY14 Budget Request. The IJFA was established by Congress to promote and encourage state activities in support of the management of inter-jurisdictional fishery resources throughout their range. Funding under the IJFA supports the monitoring and assessment programs of the States and Interstate Commissions, as well as funding for research that gauge the health of commercially and recreationally important fish stocks. The IJFA is a matching grant program. Funds received by the States must be matched on a dollar-for-dollar basis. This is a classic example of an effective and affordable federal/state partnership for the management of near shore fisheries with inter-jurisdictional boundaries. The Administration used its discretion to allocate “unspecified reductions” within the 2012 NOAA Spend Plan to eliminate the IJFA grants for 2012. During consideration of the Commerce-Justice-Science appropriations for Fiscal Year 2013, as part of the Continuing Resolution, Congress restored the IJFA program to \$2 million. The three Interstate Marine Fisheries Commissions strongly support this action.

NOAA is currently going through a painful process of reducing its budget to conform to the Sequestration budget targets. **In an era of declining budgets, programs such as the IJFA that approach a dollar-for-dollar match should be fostered because they maximize the financial resources available for marine conservation and management. Authorizing and appropriating \$2.5 million annually for the IJFA results in an equal financial commitment from the States.**

“Regional Councils and Fisheries Commissions”

The President's FY13 Budget also calls for \$27,349,000 for the "Regional Councils and Fisheries Commissions" NOAA line item in Fiscal Year 2013, a reduction of roughly \$4.5 million over the levels enacted in FY12. The Regional Councils are the workhorses of the Federal regulatory process for marine fisheries. Each Council is working to revise the fishery management plans under its jurisdiction to end overfishing and rebuild fish stocks. The ability of the Councils and Commissions to fulfill their statutory mandates will be severely hampered by the proposed cutbacks. As part of the Continuing Resolution, the Conferees have proposed an appropriation of \$31,555,000 for the "Regional Councils and Fisheries Commissions" line item. The three Interstate Marine Fisheries Commissions strongly support this level of funding.

Commission Activities Supported by IJFA and "Councils and Commissions"

Pacific Region

IJFA funds are used by the PSMFC to coordinate the Tri-State Dungeness Crab Fishery. With a landings value in 2011 of over \$185 million, Dungeness Crab is the most valuable crab fishery in the U.S. It is managed on an inter-jurisdictional basis with funding from the IJFA. This was a federal fishery delegated to the States of Washington, Oregon, and California for management under the Magnuson-Stevens Act. If funding for this management regime ceases, NOAA will be forced to take the fishery back to the Pacific Fishery Management Council to develop a new fishery management plan.

PSMFC and the West Coast states also use their IJFA matching grants to engage in a wide range of other activities, including the conduct of rockfish surveys and tagging projects on the West Coast; management of the Pink Shrimp Fishery; management of the coastal pelagic species fisheries (Pacific Sardines, Pacific Mackerel, and Jack Mackerel account for 86,000 tons of commercial catch in California); research on the abundance and migratory patterns of steelhead on the Snake River; spawning and catch sampling of Pink, Chum, and Coho in Southeast Alaska; and conservation of coastal cutthroat trout (an ESA listed species); and technical support for the U.S.-Canada Groundfish Committee, which is tasked with inter-jurisdictional management cooperation for groundfish that border both nations.

The potential additional cuts in funding in the Councils/Commissions line item will reduce public participation in the North Pacific and Pacific Fishery Management Councils. Each Council currently meets five times per year. The proposed cuts would result in at least one of the meetings and possibly two being cancelled. The Councils will be required to reducing staffing by 25 percent. This will result in less public outreach and lower stakeholder input. With fewer meetings and less staff to analyze and present scientific information to Council Members, the Councils will be forced to err on the side of caution, resulting in smaller quotas and quicker fishery closures. This will result in lost jobs in the fishing and seafood processing industries, less sport fishing time, and a reduction in taxes to Federal, State, and Local Governments. The North Pacific Council will have to slow down its work in resolving halibut and salmon bycatch issues; the halibut catch sharing plan; and the implementation of new regulatory amendments to address safety issues in the factory longline fishing fleet. The Pacific Council will be hampered in its ability to regulate the Sacramento River fall Chinook fishery, which is currently experiencing a rebound from the fishery disasters of 2008 and 2009.

Gulf Region

In the Gulf of Mexico, the IJFA is the cornerstone for the states' fishery management programs and has provided support for the five Gulf States' long-term databases for commercial and non-commercial crustaceans and finfish in the Gulf of Mexico. State and federal stock assessments are increasingly utilizing the fishery-independent databases and will be critical to future regional management success and provide the States' the ability to gauge the health of commercially and recreationally important fish stocks in their waters. As new stock assessment methodologies, such as ecosystem and food web approaches to fisheries management are explored and implemented, these state-derived fishery-independent data will be even more important. However, the ability to conduct stock assessments will hinge upon the quality and duration of these datasets which have been supported by the IJFA.

Under the IJFA language, the appropriations provided to the states to support their respective fisheries monitoring programs are determined by a formula based on a state's total marine fisheries landings. Based on the 2011 appropriations, the maximum allocation that any state could receive was approximately \$100,000 and the minimum was approximately \$8,000. The Gulf of Mexico had three 'maximum' states by volume and value. In the Gulf region, nearshore species such as Spanish mackerel, striped mullet, blue crab, and oyster comprise the majority of the commercial and recreational harvest, resulting in significant social and economic benefits to the states and the nation. In 2009, prior to BP's Deepwater Horizon disaster, 82% of the Gulf's total commercial fishery value was derived from state waters. Finally, the IJFA also allows Congress to provide assistance to the states in the event of a Fisheries Disaster under SEC. 113 in the form of funds and other economic assistance and does not require state match for financial relief such as the emergency disaster relief funding package following hurricanes Katrina and Rita in 2005.

The loss of IJFA funds in the Gulf region in 2011 and 2012 has resulted in drastically reduced support for the monitoring of our shrimp, crab, and finfish fisheries. The loss of IJFA has resulted in the elimination of other funding sources under the 1-for-1 match requirement, including contributions from limited state license revenues. Florida has lost three positions from their blue crab, shrimp, and horseshoe crab program which represents 40% of their crustacean research staff. Texas has reprioritized other funding to determine the status of their shellfish populations for formulating shellfish management and harvest regulations in coastal waters. Louisiana will be reprioritizing their sampling programs which may slow the development of appropriate management recommendations. Mississippi has been forced to reduce efforts in other state fishery programs to make up the difference to continue collecting long-term fishery-independent data. Alabama reports that the loss of IJFA funding has resulted in less efficient enforcement related to Alabama and Gulf of Mexico fisheries and the interactions of fishing activities among protected species.

In addition to the five States' fisheries monitoring, the IJFA also provides funding for the GSMFC to regionally coordinate inshore, state water fishery resources by the development of regional Fishery Management Plans (FMP). The FMPs are used by the states to enact appropriate management strategies with conservation standards intended to maintain sustainable stocks into the future and provide coordinated support to get these management measures passed

through their respective state commissions and/or legislative bodies. The GSMFC currently has 16 species under management plans or profiles with 10 additional species identified for future plan development. Future reauthorizations of the IJFA should be taken into consideration funding levels appropriate to the cost of fisheries management for today and beyond.

Atlantic Region

The fiscal resources available to ASMFC have been nearly static, and diminished in some areas, during the past decade. However, the demands of stakeholders, the necessary rigor of stock assessments, and the simple cost of administering and maintaining the transparency of the ASMFC process has increased. This contrast between funding and demands has required the ASMFC to prioritize activities at the expense of stock assessments and fishery management updates. This constraining of the ASMFC's budget is occurring at a time of unprecedented state budget cuts and threatens to limit the effectiveness of the ASMFC process and interstate management along the Atlantic coast.

The ASMFC process is extremely efficient and produces a high return on investment. With a budget of under \$10 million annually, the ASMFC manages 25 species that generate billions of dollars of economic activity from Maine through Florida. In fact, 35% of the total commercial landings value from Atlantic fisheries in 2011 was attributed to landings within 3 miles of shore. Over 90% of the Atlantic coast recreational catch is taken in state waters. This investment by Congress and the states in the ASMFC process likely represents one of the best return rates in all natural resource management. Continued investment in interjurisdictional management along the Atlantic coast will fund data collection and assessments to support better management decisions and restoration of stocks. Improved management will create more fishing opportunities and jobs and strengthen economic activity for Atlantic coastal communities.

The IJFA grants, though some may be small, have been successfully leveraged by the states to boost their survey, data collection, and monitoring abilities, including northern shrimp and American lobster sampling in New England; monitoring state quotas of black sea bass, summer flounder, and striped bass in the Mid-Atlantic; and surveying flounders, drum, shrimp and crabs in the South Atlantic. The program is a matching grant program, so the funds received by the states must be matched dollar to dollar.

The Atlantic Coastal Fisheries Cooperative Management Act (Atlantic Coastal Act) requires the Atlantic states to develop FMPs through the ASMFC and to implement and enforce those plans under state law, under penalty of pre-emption of a state's fishery by the Secretary of Commerce. The continued reduction in "Regional Councils and Commissions" funding would reduce the capacity of the ASMFC as well as its member states to develop, implement, and enforce FMPs. "Regional Councils and Fisheries Commissions" funding goes to help provide valuable sources of data that allow fisheries managers to achieve sustainability for commercial and recreational fisheries, generating billions of dollars of economic activity. Further budget cuts to the program would force the ASMFC to eliminate one of four ASMFC meetings, cancel stock assessment training for state scientists, delay (one year) benchmark stock assessments for American lobster, Atlantic striped bass, and northern shrimp, eliminate a stock assessment scientist position, suspend outreach activities, and reduce FMP coordination capacity. The resultant impact would reduce the opportunity for public engagement in the management

process; decrease the quantity, quality, and timeliness of scientific advice; and reduce the ASMFC's responsiveness to fisheries management issues. Greater scientific uncertainty would likely result in more precautionary management decisions, with consequent opportunity costs to commercial and recreational harvesters due to lower quotas and shorter seasons. Greater uncertainty also may decrease the justification for ASMFC actions, potentially resulting in legal vulnerability. Through the ASMFC process, states have reduced the number of overfished species by over 50% during the past decade; further progress towards rebuilding overfished species will be hampered by budget cuts and resulting lack of data and slowed response time.

Cutting Atlantic Coastal Act grants to the states would reduce the fisheries management and science activities needed to comply with the provisions of the Act. States use these funds to conduct nearshore fisheries surveys, assess stocks, monitor catches, and interact with stakeholders to implement and enforce the fisheries management measures approved by the ASMFC. For New England states, this would result in a loss of the ability to accurately track landings for quota management, prompting more precautionary management and potential triggering of accountability measures. Within the Mid-Atlantic region, lack of funding would lead to a direct loss of law enforcement presence. In addition, funding supports monitoring and management of important state and interstate fisheries, such as blue crab and horseshoe crab in Delaware, and red drum, Atlantic menhaden, and flounders in North Carolina. South Atlantic states use the funding to support both fishery monitoring and independent surveys, including Georgia's long-time trawl survey, which has been collecting data on shrimp, crabs, and finfish since the 1970s. In addition, funding supports data collection of bycatch, including protected species like sea turtles and Atlantic sturgeon, throughout the Mid- and South Atlantic.

On the federal side, there are three East Coast fishery management councils. The Administration's proposed 22% funding reduction (from FY12 to FY13) for the "Regional Councils and Fisheries Commissions" funding line item would reduce their capacity to engage stakeholders in development of FMPs and annual harvest levels. These cuts would reduce the number of meetings of each Council by at least one meeting per year; it would impact meetings of their Statistical and Science Committees and stakeholder advisory panels. These cuts would reduce scientific staff capacity to support crucial management questions and reduce FMP coordination capacity. The resultant impacts, similar to those for the ASMFC, would restrict opportunities for public involvement in the management process and decrease scientific advice available to managers, resulting in negative impacts on the Councils' ability to fulfill the requirements under the Magnuson-Stevens Fishery Conservation and Management Act. Further, the Councils' response to stakeholder input and their ability to make the necessary updates to NOAA's improved recreational data collection program and annual catch limits will be delayed or diminished.



**Human Factors
and Ergonomics
Society**

**Official Written Testimony in Support of Fiscal Year 2014
Funding for the National Science Foundation**

Submitted to the Subcommittee on Commerce, Justice, Science and Related Agencies
Committee on Appropriations
United States House of Representatives
March 21, 2013

Submitted by

Eduardo Salas, PhD, President, Human Factors and Ergonomics Society
Lynn Strother, CAE, Executive Director, Human Factors and Ergonomics Society

On behalf of the Human Factors and Ergonomics Society (HFES), I am pleased to provide this written testimony to the House Appropriations Subcommittee on Commerce, Justice, Science and Related Agencies for the official committee record. **HFES urges the Subcommittee to provide the highest possible funding level for the National Science Foundation (NSF) in the fiscal year (FY) 2014 Commerce, Justice, Science and Related Agencies Appropriations Act.**

HFES and its members recognize and appreciate the challenging fiscal environment in which we as a nation currently find ourselves; however, we believe strongly that investment in scientific research serves as an important driver for the economy and for maintaining American global competitiveness. We thank the Subcommittee for its longtime recognition of the value of NSF and urge your ongoing support, which is especially critical in these trying times. Further, HFES strongly urges the Subcommittee to reject proposals to defund social science at NSF. This work is critically important to advancing our understanding of the human components of complex scientific questions, as discussed in this testimony. Now is the time to invest in science and engineering—not to cut.

The Value of Human Factors and Ergonomics Science

The Human Factors and Ergonomics Society (HFES) is a multidisciplinary professional association with 4,500 individual members worldwide, including psychologists and other scientists, engineers, and designers, all with a common interest in designing safe and effective systems and equipment that maximize and adapt to human capabilities.

For over 50 years, the U.S. federal government has funded scientists and engineers to explore and better understand the relationship between humans, technology, and the environment. Originally stemming from urgent needs to improve the performance of humans using complex systems such as aircraft during World War II, the field of human factors and ergonomics (HF/E) works to develop safe, effective, and practical human use of technology. HF/E does this by

developing scientific approaches for understanding this complex interface, also known as “human-systems integration.” Today, HF/E is applied to fields as diverse as transportation, architecture, environmental design, consumer products, electronics and computers, energy systems, medical devices, manufacturing, office automation, organizational design and management, aging, farming, health, sports and recreation, oil field operations, mining, forensics, and education.

With increasing reliance by federal agencies and the private sector on technology-aided decision-making, HF/E is vital to effectively achieving our national objectives. While a large proportion of HF/E research exists at the intersection of science and practice—that is, HF/E is often viewed more at the “applied” end of the science continuum—the field also contributes to advancing “fundamental” scientific understanding of the interface between human decision-making, engineering, design, technology, and the world around us through research funded by NSF. The reach of HF/E is profound, touching nearly all aspects of human life from the health care sector, to the ways we travel, to the hand-held devices we use every day.

Human Factors and Ergonomics at the National Science Foundation

NSF makes important investments in HF/E. The agency supports HF/E through a range of programs within the Research and Related Activities (R&RA) account. The field of HF/E is unique in that it bridges psychological science (or social science) with engineering and design. This partnership between disciplines is what makes HF/E effective as it brings together researchers who look at a technology or system from all sides, including the human and user perspectives. HF/E science is funded primarily in the following NSF directorates: Social, Behavioral and Economic Sciences (SBE); Engineering (ENG); and Computer and Information Science and Engineering (CISE). However, involvement of HF/E researchers is found throughout the Foundation in projects that seek to gain a better understanding between humans, technologies or systems.

In particular, NSF funds HF/E research to:

- Better understand and improve the effectiveness of how individuals, groups, organizations, and society make decisions.¹
- Improve understanding of the relationship between science and engineering, technology, and society, in order to advance the adoption and use of technology.²
- Gain a better understanding of how humans and computers interact to ensure the development of new devices or environments that empower the user.³
- Inform decision making in engineering design, control, and optimization to improve individual engineering components and entire systems.⁴

¹ Decision, Risk & Management Sciences (DRMS) Program
(http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5423)

² Science, Technology, and Society (STS) Program
(http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5324&org=SES&from=home)

³ Human Centered Computing (HCC) Program
(http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503302&org=HIS&from=home)

⁴ Systems Engineering and Design Cluster
(http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13473&org=CMMI&from=home)

For example, NSF has funded specific HF/E projects that:

- Seek to better understand and optimize human-computer interactions, such as machine learning and machine intelligence.
- Propose to develop personal devices that assist children and adults with disabilities navigate the environment around them.
- Advance the human-computer interface to improve visual displays, which have real-world implications for improvements in classroom learning, architecture and building construction, visualization of scientific data, and control room efficiency, to name a few examples.

In addition, given the inherently interdisciplinary nature of HF/E—that is, the bridging of social and behavioral science with engineering, computing, and design—initiatives such as the Integrated NSF Support Promoting Interdisciplinary Research and Education (INSPIRE) program serve as critical new opportunities for the HF/E research community. While HFES appreciates the value of disciplinary science, interdisciplinary science and interdisciplinary research teams represent the future for tackling complex, multifaceted societal challenges. HFES supports NSF's efforts to bridge disciplines in these ways.

Investing in the Future Scientific Workforce

Through its various graduate student, early career, and other training programs, NSF invests in the future of the scientific workforce. These programs are critically important to HF/E, especially given the interdisciplinary nature of the field and the need for future scientists and engineers to be equipped with the skills needed to meet the demands that will be placed on the scientific workforce.

Human systems engineering is less recognized than other engineering professions as a key participant in the development of system requirements, as contributors during the system design process, and as a mandatory requirement for system test and validation. Programs such as the NSF **Integrative Graduate Education and Research Traineeship (IGERT)** and the **Transforming Undergraduate Education in Science, Technology, Engineering and Mathematics (TUES)** program include not only the firm foundation of good research but also the skills needed to translate good science into engineering practice in the many industries and settings where HF/E is practiced.

HFES urges the Subcommittee to continue to support NSF's training, fellowship and career development programs, including the IGERT program, TUES program, Graduate Research Fellowship (GRF) program, and the Faculty Early Career Development (CAREER) programs. These programs provide support to the nation's most promising early career scientists, ensuring a bright future for the scientific enterprise.

During this challenging budget environment, including sequestration, NSF has chosen to protect funding for the science, technology, engineering and mathematics (STEM) pipeline through support for programs like these. While it may result in less funding for research projects, this was the right decision as the training pipeline cannot be turned off one year and back on the next

based on the current budget situation without risking long term damage to the scientific workforce. Siphoning off funds from training today will undoubtedly have impacts on the workforce down the road; instead, continuous support is needed year-to-year.

Conclusion

On behalf of the Human Factors and Ergonomics Society, I would like to thank you for the opportunity to provide this testimony. Please do not hesitate to contact me should you have any questions about HFES, HF/E research, or the importance of NSF funding. HFES truly appreciates the Subcommittee's long history of support for this crucial agency and urges you to appropriate the highest possible funding level for NSF in FY 2014.

HFES looks forward to providing any additional information or assistance you may ask of us during the FY 2014 appropriations process.

INDEPENDENT REVIEW TEAM
8565 W. Granada Road Phoenix, AZ 85037 (602) 418-8937 ⇔ (623) 936-8758 fax ⇔ Email: ecoochise@msn.com

TESTIMONY OF ELBRIDGE COOCHISE, CHIEF JUSTICE, RETIRED**INDEPENDENT TRIBAL COURTS REVIEW TEAM****SUBMITTED TO THE HOUSE COMMERCE, JUSTICE, SCIENCE RELATED AGENCIES
APPROPRIATIONS****SUBCOMMITTEE FOR THE FISCAL YEAR 2014****DEPARTMENT OF JUSTICE – TRIBAL COURTS****March 21, 2013**

Thank you for the opportunity to provide testimony today and address the serious funding needs that have limited and continue to hinder the operations of Tribal judicial systems in Indian Country. I am the Lead Judge of the Independent Tribal Court Review Team. **We are here today to request funding for Tribal Courts in the Department of Justice, Office of Justice Programs for the Tribal Courts Assistance Program.**

Budget Priorities, Request and Recommendations

1. **+Increase funding for Tribal Courts by \$10 million**
2. **Maintain the set-aside for Tribal Courts**
3. **Fully Fund all provisions of the Tribal Law and Order Act of 2010**
4. **Fully Fund all provisions of the VAWA Act of 2013**
5. **+ \$58.4 million authorized under the Indian Tribal Justice Act of 1993, P.L. 103-176, 25 USC 3601 and re-authorized in year 2000 P.L. 106-559 (no funds to date)**

We support the 7% Tribal set-aside (\$81,375,000) from all discretionary Office of Justice Programs to address Indian Country Public Safety and Tribal Criminal Justice Needs. However, this is not sufficient to address the need in terms of equity for Indian Country relative to funding appropriated for state, local and other Federal justice assistance programs. On behalf of the Independent Review Team, I ask that you give every consideration to increasing this program to the FY 2010 enacted level for the Tribal Assistance Account and allow for greater flexibility for Tribes to use these funds at the local level.

We Support an Increase in Funding for:

1. **Hiring and Training of Court Personnel** - Tribal Courts make do with underpaid staff, under-experienced staff and minimal training. (We have determined that hiring Tribal members limits the inclination of staff to move away; a poor excuse to underpay staff.)
2. **Compliance with the 2010 Tribal Law & Order Act** – To provide Judges, Prosecutors, Public Defenders, who are attorneys and who are bared to do “enhanced sentencing” in Tribal Courts

3. **Compliance with the 2013 VAWA Act** – to provide Tribal Courts with the ability to provide non-Indians with all the rights under the U.S. Constitution in domestic violence actions in Indian country
4. **Salary Increases for Existing Judges and Court Personnel** – Salaries should be comparable to local and State Court personnel to keep pace with the non-Tribal judicial systems and be competitive to maintain existing personnel
5. **Tribal Courts Need State-of-the-Art Technology** - (software, computers, phone systems, tape recording machines.) Many Tribes cannot afford to purchase or upgrade existing court equipment unless they get a grant. This is accompanied by training expenses and licensing fees which do not last after the grant ends.
6. **Security and Security Systems to Protect Court Records and Privacy of Case Information** - Most Tribal Courts do not even have a full time Bailiff, much less a State-of-the-Art security system that uses locked doors and camera surveillance. This is a tragedy waiting to happen.
7. **Tribal Court Code Development** - Tribes cannot afford legal consultation. A small number of Tribes hire on-site staff attorneys. These staff attorneys generally become enmeshed in economic development and code development does not take priority. Tribes make do with under-developed Codes. The Adam Walsh Act created a hardship for Tribes who were forced to develop codes, without funding, or have the state assume jurisdiction. (States have never properly overseen law enforcement in a Tribal jurisdiction.)
8. **Financial Code Development** - We have rarely seen Tribes with developed financial policies. The process of paying a bond, for example, varies greatly from Tribe to Tribe. The usual process of who collects it, where it is collected and how much it is, is never consistent among Tribes.

Nationwide, there are 184 Tribes with Courts that receive Federal funding. For the past seven years, the Independent Court Review Team has been traveling throughout Indian Country assessing how Tribal Courts are operating. During this time, we have completed some 84 court reviews. There is no one with more hands-on experience and knowledge regarding the current status of Tribal Courts than our Review Team.

We have come into contact with every imaginable type of Tribe; large and small, urban and rural, wealthy and poor. What we have NOT come into contact with is any Tribe whose Court system is operating with financial resources comparable to other local and State jurisdictions. Our research indicates Tribal Courts are at a critical stage in terms of need.

There are many positive aspects about Tribal Courts. It is clear that Tribal Courts and justice systems are vital and important to the communities where they are located. Tribes value and want to be proud of their Court systems. Tribes with even modest resources tend to send additional funding to Courts before other costs. After decades of existence, many Tribal Courts, despite minimal funding, have achieved a level of experience and sophistication approaching, and in some cases surpassing, local non-Indian Courts.

Tribal Courts, through the Indian Child Welfare Act, have mostly stopped the wholesale removal of Indian children from their families. Indian and Non-Indian Courts have developed formal and informal agreements regarding jurisdiction. Tribal governments have recognized the benefit of having law-trained Judges, without doing away with Judges who have cultural/traditional experience. Tribal Court systems have Appellate Courts, jury trials, well-cared-for Courthouses (even the poorer Tribes), and Tribal Bar listings and fees. Perhaps most importantly, Tribes recognize the benefit of an Independent Judiciary and have taken steps to insulate Courts and Judges from political pressure. No longer in Indian country are Judges automatically fired for decisions against the legislature.

Assessments have indicated that the Bureau of Indian Affairs (BIA) only funds Tribal Courts at 26% of the funding needed to operate. This funding will be critically impacted with the 5% reduction and an additional impending rescission of 0.96%. The remainder is funded by the Tribes. Tribes who have economic development generally subsidize their Tribal Courts. On the flip side, Tribes who cannot afford to assist in the financial operations of the Court are tasked with doing the best they can with what they have even at the expense of decreasing or eliminating services elsewhere. This while operating at a disadvantage with already overstrained resources and underserved needs of the Tribal members. The assessment suggests that the smaller Courts are both the busiest and most underfunded.

We thank this Committee for the additional \$10.0 million funding in FY 2010. These funds were a Godsend to Tribes. Even minimal increases were put to good use. The additional funding in FY2014 will be a big asset and coupled with Tribes having flexibility on how to use these funds will greatly improve access to funding for Tribal courts.

The grant funding in the Department of Justice is intended to be temporary, but instead it is used for permanent needs; such as funding a Drug Court Clerk who then is used as a Court Clerk with Drug Court duties. When the funding runs out, so does the permanent position. We have witnessed many failed Drug Courts, failed Court management software projects (due to training costs) and incomplete Code development projects. When the Justice funding runs out, so does the Project.

As a directive from the Office of Management and Budget, our Reviews specifically examined how Tribes were using Federal funding. In the past several years, there were only two isolated incidents of a questionable expenditure of Federal funds. It is speculated that because of our limited resources, we compromise one's due process and invoke "speedy trials" violations to save Tribal Courts money. Everyone who is processed through the Tribal judicial system is afforded their Constitutional civil liberties and civil rights.

We do not wish to leave an entirely negative impression about Tribal Courts. Tribal Courts need an immediate, sustained and increased level of funding. True. However, there are strong indications that the Courts will put such funding to good use.

There are several courts where the roofs leak when it rains and those court houses cannot be fixed due to lack of sufficient funds. The Team took pictures of those damaged ceilings for the BIA hoping to have additional funds for the Tribes to fix the damaged ceilings.

Tribal Courts have other serious needs. Tribal Appellate Court Judges are mostly Attorneys who dedicate their services for modest fees that barely cover costs for copying and transcription fees. Tribal Courts offer Jury Trials. In many Courts, one sustained Jury Trial will deplete the available budget. The only place to minimize expenses is to fire staff. Many Tribal Courts have Defense Advocates. These advocates are generally law trained and do a good job protecting an individual's rights (including assuring that speedy trial limitations are not violated). This is a large item in Court budgets and if the defense advocate, or Prosecutor should leave, the replacement process is slow.

The need is greater if the Tribal Courts follow the Tribal Law & Order Act of 2010 (TLOA), that requires barred attorneys to sit as judges, prosecutors, defense attorneys, when using the "enhanced sentencing" and enhanced jail detention, options of this Act. Partial funding for TLOA is not an option if Indian Country is expected to benefit from the intent of Congress. We ask that you fully fund the investment you made in Tribal Justice Systems by authorizing both the Tribal Law and Order Act of 2010 and the Indian Tribal Justice Act of 1993. Otherwise the continued lack of resources for Tribal Justice Systems will continue to pose a threat to Native citizens and the future of Indian country.

There is an additional need if the Tribal Courts are to follow the newly enacted VAWA Act of 2013 in domestic violence with jurisdiction over non-Indians in providing the full constitutional rights afforded under the United States Constitution.

We feel it is our duty to submit this testimony and provide these facts on behalf of Tribe's Tribal Courts to advocate for better funding. Tribes ask us to tell their stories. They open their files and records to us and say, "We have nothing to hide". Tell Congress we need better facilities, more law enforcement, more detention facilities, more legal advice, better codes... the list goes on and on. But, as we have indicated, it all involves more funding. This Congress and this Administration have advanced legislation that improves health and safety for Indian people. However, not fully funding the authorized appropriations in these bills only partially fulfills the intent of the legislation. Put the money where your promises have been!

Finally, we support the requests and recommendations of the *National Congress of American Indians*.

On behalf of the Independent Tribal Court Review Team thank you.

Statement of the Institute of Makers of Explosives
Submitted by
Cynthia Hilton
Executive Vice President
chilton@ime.org

For the Subcommittee on Commerce, Justice, Science and Related Agencies
U.S. House of Representatives

FY 2014 DOJ Budget Request for the Bureau of Alcohol, Tobacco, Firearms and Explosives

Interest of the IME

IME is a nonprofit association founded a century ago to provide accurate information and comprehensive recommendations concerning the safety and security of commercial explosive materials. IME represents U.S. manufacturers, distributors and motor carriers of commercial explosive materials and oxidizers as well as other companies that provide related services. The majority of IME members are “small businesses” as determined by the U.S. Small Business Administration.

Millions of metric tons of high explosives, blasting agents, and oxidizers are consumed annually in the United States. These materials are essential to the U.S. economy. Energy production, construction, and other specialized applications begin with the use of commercial explosives. IME member companies produce ninety-nine percent of these commodities. These products are used in every state and are distributed worldwide. The ability to manufacture, distribute and use these products safely and securely is critical to this industry.

Commercial explosives are highly regulated by a myriad of federal and state agencies. ATF plays a predominant role in assuring that explosives are identified, tracked, purchased, and stored only by authorized persons. In the absence of the Administration’s FY 2014 budget request, we are in uncharted territory in terms of our analysis of the President’s budgetary priorities.¹ Likewise, as Congress presses ahead to finalize appropriations for FY 2013, we are not privy to specifics as to how ATF may prioritize the work of the agency’s programs overseeing the explosives industry. Nevertheless, we offer the following comments to give perspective about the need to ensure that the ATF has sufficient funds to carry out its mission to ensure that commercial explosives are not misappropriated for criminal or terrorist purposes.

ATF’s Explosives Regulatory Program

As of the date of this comment, it appears that Congress is prepared to provide a FY 2013 appropriation of \$1.153 billion for ATF, subject to a sequestration order if the President fails to reach agreement with Congress on an alternative. This is the same amount as in the

¹ The Budget Act requires the submission of the President’s budget request by the first Monday in February. The current expectation is that the President’s FY 2014 request will be released in April.

Administration's original budget request of FY 2013. The administration's FY 2013 budget request proposed to decrease resources devoted to ATF's regulation and oversight of explosives industries by 24 FTE, a seven percent reduction, from 335 FTE to 311 FTE, for a savings of \$940,000.² This FTE reduction represents nearly half of the staffing reduction the Bureau's Arson and Explosives Program is being asked to absorb. Given that it appears Congress is prepared to accept the President's request, we assume that the staffing cuts will be enacted. As we look forward to FY 2014, the budget situation does not improve. We understand that the cap on non-emergency appropriations for FY 2014 to drop to \$966 billion, down from the cap of \$984 billion in FY 2013.

We understand the current urgency to address the federal budget deficit. We understand the shared sacrifice that all segments of the government are being asked to make to help the economy recover by spurring job growth and investment. We also understand the public attention to other programmatic responsibilities of ATF, and the attendant pressure to divert resources to the addressing these responsibilities. However, the success of the Bureau's explosives industry programs to prevent the misappropriation of commercial explosives should not be used against us. Budgetary cuts of personnel essential to perform services needed by our industry to engage in the commerce of explosives, hurts our industry, our customers, and the U.S. economy.

By law, ATF must inspect over 11,000 explosives licensees and permittees at least once every three years³ and conduct background checks of so-called "employee possessors" of explosives and "responsible persons." During FY 2012, ATF conducted over 4,000 such compliance inspections and identified 1,392 public safety violations.⁴ In addition to this workload, ATF must process applications for new explosives licenses and permits as well as those submitted for renewal of existing licenses and permits. Over 2,700 such applications were processed during the last full fiscal year.⁵ The Bureau must also conduct inspections of all new applicants. Over 56,000 background checks were completed for employee possessors and over 9,000 for responsible persons.⁶ These are significant workload indicators.

ATF recognizes that its ability to perform its statutory responsibilities will be negatively impacted by these resource cuts. ATF estimates that, in FY 2010, it met its statutory responsibilities 95.8 percent of the time. In FY 2012, it estimates that this performance rate will fall to 88 percent. And, with the resource cuts anticipated in FY 2013, this outcome metric will fall to 85 percent, before the potential effect of sequester. The Bureau's falling productivity cannot help but have adverse impacts on our industry. Without approved licenses and permits from ATF, our industry cannot conduct business. Delays in servicing the needs of our industry may lead to disruptions in other segments of the economy that are dependent on the products and materials we provide.

² FY 2013 ATF Budget Submission, page 49.

³ ATF estimates that the requirement to inspect 100 percent of the licensees and permittees within their three-year license/permit cycle consumes between 25 percent and 41 percent of available inspector resources in any given year.

⁴ FY 2013 ATF Budget Submission, page 42.

⁵ FY 2013 ATF Budget Submission, page 42.

⁶ FY 2013 ATF Budget Submission, page 42.

At the same time, duplication between government programs wastes resources. The U.S. Government Accountability Office (GAO) has highlighted areas of duplication between the ATF and the Federal Bureau of Investigation (FBI) that relate to explosives incidents.⁷ As early as 2004, duplication and overlap were identified in the areas of investigations, training, information sharing and use of databases, and laboratory forensic analysis. While ATF's budget request provides updates of plans for consolidating and eliminating these redundancies, we continue to watch for other potential areas of overlap. In describing its role as the sole repository of data on explosives incidents, ATF states that "eight billion pounds of ammonium nitrate are produced, of which half is used for explosives."⁸ In fact, the percentage used by the explosives industry has been rising and currently stands at 70 percent. As a regulatory matter, the security of ammonium nitrate (AN), along with other explosives precursors, has been delegated to the U.S. Department of Homeland Security (DHS). We believe that DHS could learn from ATF's regulation of commercial explosives as it finalizes rules to secure the commerce of AN. In particular, DHS should recognize that employees who have been vetted and cleared by ATF to possess explosives should not have to be vetted again in order to engage in the commerce of AN.

As the Subcommittee considers ATF's budget request, we ask that the Bureau's ability to perform its regulatory oversight of the explosives industry in a timely fashion not be compromised in the push for fiscal discipline when other areas of duplication and overlap are ripe for reform.

ATF's Regulatory Workload

Since 2003 when ATF was transferred to the Department of Justice, the agency has issued eight rulemakings of importance to IME (including two interim final rules). It has finalized three, withdrawn two, and merged two. Of the two rulemakings still pending, one is an interim final rule which dates to 2003. In the absence of a process to ensure timely rulemaking that is capable of keeping up with new developments and safety practices, industry must rely on interpretive guidance and variances from outdated requirements in order to conduct business. While we greatly appreciate the Bureau's accommodations, these stop-gap measures do not afford the continuity and protections that rulemaking would provide the regulated community, nor do they allow the oversight necessary to ensure that all parties are being held to the same standard of compliance. These regulatory tasks are critical to the lawful conduct of the commercial enterprises that the Bureau controls. ATF should be provided the resources to make timely progress in this area.

ATF-Industry Partnership

The ATF Bomb Data Center (BDC) is the sole repository for explosives related incident data, and contains information on thousands of explosives incidents investigated by ATF and other Federal, state, and local law enforcement agencies. While this data helps government entities to perform trend analysis and to compare incidents for similarities and crime methodologies, BDC data would also help industry as it refreshes and updates best practice recommendations.

⁷ "Opportunities to Reduce Potential Duplication in Government Programs, Save Tax Dollars, and Enhance Revenue," GAO, March 2011, pages 101-104, <http://www.gao.gov/new.items/d11318sp.pdf>.

⁸ FY 2013 ATF Budget Submission, page 38. 2012 data estimates put total AN production at 6.8 billion pounds.

Until 2006, this data used to be routinely provided to industry stakeholders. IME is currently engaged in discussion with ATF in the hope that the Bureau will once again provide the regulated community key data on bomb or improvised device fillers, as well as thefts, losses and recoveries by type and amount of explosives and point in the supply chain when the thefts and losses occurred. ATF needs the resources to continue this important service.

Explosives manufacturers and importers are required to mark our products with codes to aid law enforcement agencies in the U.S. and in foreign countries in the tracing of these materials when they are lost or stolen. Explosives manufacturers and importers and others in the global supply chain cooperate in tracing efforts. However, more and more government entities are imposing their own unique system of marks without reciprocally recognizing each other's marks. These redundant and competing marks are creating non-tariff barriers to trade. We are asking ATF to join with us in working to harmonize a global marking standard.

Since 2003, ATF, with our support, has required background checks of persons authorized to possess explosives. While this background check included vetting against the Terrorist-Screening Database (TSDB), being named on the database does not disqualify individuals from possessing explosives. We think this is an oversight. Recently, Senator Frank Lautenberg and Representative Peter King introduced legislation, S. 34 and H.R. 720, respectively, to close this glaring security gap in federal explosives law. This legislative change will better harmonize the vetting and clearance procedures used by the ATF with other government agencies that perform security threat assessments of individuals seeking to engage in security-sensitive activities. As these standards are harmonized, opportunities to leverage other vetting programs and security credentials increases. This outcome would add intelligence value to all government vetting programs sharing the same platform, and provide savings to the federal government and the regulated community.

Industry Standards

We take seriously the statutory obligation that ATF take into account industry's standards of safety when issuing rules and requirements.⁹ We continue to fulfill this obligation through our development of industry best practices for safety and security, membership in relevant standard-setting organizations, and active participation in forums for training. We have offered ATF recommendations that we believe will enhance safety and security through participation in the rulemaking process, in the Bureau's important research efforts, and in other standard-setting activities.

In this regard, IME has spent years developing a credible alternative to strict interpretation of quantity distance tables used to determine safe setback distances from explosives. IME collaborated in this development with the Department of Defense Explosives Safety Board as well as Canadian and U.S. regulatory agencies, including ATF. The result is a windows-based computer model for assessing the risk from a variety of commercial explosives activities called IMESAFR.¹⁰ ATF and other regulatory agencies are recognizing the value of IMESAFR and

⁹ 18 U.S.C. 842(j).

¹⁰ IMESAFR was built on the DDESB's software model, SAFER. The DDESB currently uses SAFER and table-of-distance methods to approve or disapprove Department of Defense explosives activities. Not only can IMESAFR determine the amount of risk presented, but it can also determine what factors drive the overall risk and what

participated in development meetings for Version 2.0. ATF is also evaluating existing licensed locations with this risk-based approach and exploring use of the software for variance requests. These efforts are vital for ATF to remain on the forefront of public safety and we strongly encourage ATF's continued support. The benefits of risk-based modeling should be officially recognized by ATF and resources should be provided to develop policies that allow the use of such models to meet regulatory mandates.

Leadership

The resolution of these issues may have to wait the appointment of a new ATF director. The Bureau has been without a director since August 2006. We support President Obama's nomination of B. Todd Jones for this position. We hope that the Senate will timely act on this nomination. The Bureau has been too long without permanent leadership.

Conclusion

The manufacture and distribution of explosives is accomplished with a remarkable degree of safety and security. We recognize the critical role ATF plays in helping our industry achieve and maintain safe and secure workplaces. Industry and the public are dependent on ATF having adequate resources to fulfill its regulatory responsibilities. It is up to Congress and, in particular, this Subcommittee to ensure that ATF has the resources it needs. We strongly recommend full funding for ATF's explosives program.

March 20, 2013

actions would lower risk, if necessary. The probability of events for the activities were based on the last 20 years experience in the U.S. and Canada and can be adjusted to account for different explosive sensitivities, additional security threats, and other factors that increase or decrease the base value.

March 21, 2013

To: U.S. House Committee on Appropriations
Subcommittee on Commerce, Justice Science and Related Agencies

From: Jan Fortney, Mother & Guardian of Adult Daughter with ID/DD
37 Yazoo Circle
Maumelle, AR 72113

REQUEST: RE: 2014 Budget of Department of Justice/Civil Rights Division –
ADA/Olmstead Enforcement Programs

Please do not fund Programs and Policies that Promote Deinstitutionalization of Persons with Severe Forms of Cognitive-Developmental Disabilities

AMOUNT OF FUNDING INVOLVED: UNKNOWN

Dear Committee Members:

Thank you for this opportunity to provide information to the House Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies. This letter is a request that Congress stop funding federal programs which use public funds to achieve dangerous public policies of deinstitutionalization of persons with severe forms of cognitive-developmental disabilities.

I am the mother and legal guardian of Kim who has profound mentally retardation with multi-handicapping conditions since birth. She is now 38 years old, and functions and understands at the level of a 15 to 22 month old child. Kim spent her first 18 ½ years in our home, and at that time in her life she seemed to want and need some independence away from Mom and Dad. At that point I made the most difficult decision of my life for Kim to live away from us. For the past 18 ½ years she has been a resident of the Conway Human Development Center (CHDC) in Conway, Arkansas. CHDC is an Intermediate Care Facility for the Mentally Retarded (ICF/MR), and is a Medicaid-certified licensed facility, as well as certified by the Commission on Accreditation of Rehabilitation Facilities (CARF).

From the very beginning Kim thrived at CHDC. Kim is very happy living there. She spends her days going to class, the gym, the pool, campus activities, church, off-grounds activities, horseback riding/therapy, and many others things too numerous to mention. She receives wonderful care from loving and caring staff members. THIS IS HER HOME!

I have taken great offense to the Department of Justice's (Civil Rights Division/Special Litigation Section) aggressive efforts to attack my daughter's home. For 8 years we as parents and guardians worried, cried, and prayed that justice would be done and her home would be

vindicated! Finally, after over \$4 million spent by our State to uphold our HDC, the DOJ was sent packing!!

I personally sat through the courtroom day after day, and I have to say that the multitude of DOJ lawyers were very disrespectful, smirking, and giggling like school children in the courtroom. Two DOJ attorneys actually pasted notes, laughed, and giggled while one of the witnesses was testifying, and it disrupted her testimony, and she began to cry. The judge had to take a break for her to be able to continue. The DOJ lawyers twisted things that were said in order to put their own "spin" on the answer. One "spin" they pronounced was, "Wouldn't you say that a person is more apt to die at CHDC than to ever leave there?" They were very arrogant! It was embarrassing!

The Olmstead decision says my daughter has the right to have the choice of institutional care as well as home and community based services. I have looked at many wavier community based provider programs for my daughter. I compared each offering to the services she receives now at CHDC. For her there is no comparison. She has more freedom to do things she wants to do at CHDC than she would if she lived in her own apartment, or house in the community. I am convinced that she has many more people involved in her daily life at CHDC than she would have in the community. Kim would not be happy living in an apartment/house with one caregiver. She would be bored, and feel isolated. It would be more restrictive for her. I know the only choice she wants is CHDC.

The US Dept. of Justice DOES NOT KNOW WHAT'S BEST FOR KIM!!

Around this great country the DOJ is swinging its heavy arm to make states conform to what they have determined to be the only method of care for individuals with severe and profound intellectual disabilities. Even though the state of Arkansas was victorious in the recent lawsuit, other states are not having the same results because of DOJ threatens costly lawsuits. The DOJ/Arkansas lawsuit was unnecessary, and created massive burdens and distractions for our state operated care facilities and their employees. It placed hardships on everyone involved, and used our "state dollars to fight federal dollars"; while all along the state operated care facility was in compliance with state and federal regulations. THIS IS NOT RIGHT! It's really absurd, and an abuse of power!

My request for you today would be to stop the Department of Justice Civil Right Division - Special Litigations Section from these over-reaching activities by limiting their budgeted funds from being used to continue to "strong-arm" state governments into settlement agreements that would be harmful and even life threatening to our most vulnerable citizens that choose to reside in licensed care facilities.

Thank you for your time and consideration in these important matters.

Respectfully,

Jan Fortney
Mother of Kim

Testimony Regarding the FY 2014 Budget Request
Submitted March 20, 2013 to the
Subcommittee on Commerce, Justice, Science, and Related Agencies
U.S. House Committee on Appropriations by
Katie Ritter, recent victim witness at the United States Courthouse in Richmond, Virginia
RE: The National White Collar Crime Center

Twenty years ago, a man named Michael Harris started a company to support research for a treatment for AIDS. Over the years, Mr. Harris collected an unknown sum of money from shareholders, telling them that their investment would be used for two things: to obtain a patent for the treatment and to fund a clinical trial.

Mr. Harris did not hold a job, but bought designer clothing, Tiffany jewels and expensive dinners. He traveled the globe for whitewater rafting, scuba, hunting and fishing trips, and talked about owning a castle in France. He implied wealth.

It's not a pretty story over the years. A repeating cycle would happen, in which successive groups of shareholders lost trust in Mr. Harris and tried, through one means or another, to force him to show what he was doing with their money...to no avail. They sued him. One group copied the patent and started another company. Many simply gave up.

I was one of those who started out trusting Mr. Harris. I borrowed \$5,000 from our home equity fund, but soon realized my money had not gone to help sick people. Like other shareholders, I gave up hope of getting it back, but hoped he would stop taking other people's money.

The FBI and the Virginia State Corporation Commission investigated Mr. Harris, and he was indicted this spring. It was a complex case: the United States Attorney's office needed critical evidence to prove that Mr. Harris used shareholder's money inappropriately.

They got that evidence, thanks to the National White Collar Crime Center. They provided an expert witness, who presented evidence of Mr. Harris' seven bank accounts, showing exactly what happened to over \$800,000 entrusted to Mr. Harris for AIDS research during the period of the indictment charges.

He spent 95% of it on personal expenses. He spent our money to ride steeplechase races. To fix up his house. To go on trips to Europe, to buy expensive trinkets. For fill-ups at the local gas station, for horse feed and vet bills, and to go on a luxury trip to New York one New Year's Eve. The National White Collar Crime Center staff showed beyond any doubt that Harris bought himself a house with the money that an AIDS-infected physician invested, hoping to take part in the clinical trials. That man is dead now.

I cried when the National White Collar Crime Center staff showed the money trail submitted as "Ritter Evidence". It wasn't just from seeing that my money--meant for AIDS victims--had been

spent on car repairs and stuff from Wal-Mart. It was because most of us had invited friends and family members to invest, too. We lost our money, but we lost other things: the respect of friends. Family trust. Faith.

Without meticulous evidence presented by the National White Collar Crime Center, Mr. Harris would probably been acquitted. But he wasn't. The jury found him guilty on all six counts tried.

Committee members, please let me urge you to fully support funding for the excellent forensic accounting work of the National White Collar Crime Center. Without them, I'd have just been Bilked-Shareholder #162". Because of the NW3C, Mr. Harris is an inmate at a federal prison.

ACTION REQUESTED: Please ensure that there is funding available to support the work of the National White Collar Crime Center, by authorizing \$15.7 million for OJP state and local law enforcement assistance competitive grants for economic, high-tech and cybercrime prevention.

**U.S. House of Representatives, Committee on Appropriations
Subcommittee on Commerce, Justice, Science and Related Agencies
“FY 2014 Members and Outside Witness Hearing”**

**Statement of former U.S. Representative Jim Ramstad
March 21, 2013**

Chairman Wolf, Ranking Member Fattah, distinguished Members of the Subcommittee. Due to a family commitment I am unable to attend today's hearing. I respectfully request my statement be entered into the record.

In FY '13 Congress had the wisdom and vision to provide dedicated Drug Court funding for the Drug Court Discretionary Grant Program so that our nation can continue to reap the substantial societal and economic benefits of this proven program. I wish to thank this committee for supporting \$45 million for Drug Courts and \$4 million for Veterans Treatment Courts in FY '13. I am requesting that the Congress maintain \$45 million for the Drug Court Discretionary Grant Program and \$4 million for Veterans Treatment Courts at the Department of Justice for FY '14.

As Congress continues the important work of restoring the fiscal strength of this nation, it is vital that investments be made in programs proven to provide a healthy return on investment. There is no greater example than Drug Courts, which save vast resources and tax dollars by reducing drug abuse, crime and recidivism at a level unmatched by any other program in our nation's history.

From serving our veterans addicted to prescription drugs and countless methamphetamine addicts; to helping juveniles addicted to designer drugs and parents facing the loss of their children due to addiction; from rural towns to our largest cities; from an alternative to incarceration to re-entry into the community, Drug Courts are having a profound impact throughout the United States. To be smart on crime, we must expand the existing Drug Court system to every addicted offender eligible for a community sentence. This approach is being praised by conservatives and liberals alike and truly warrants strong Congressional support.

In 2011, the Government Accountability Office released its fourth report on Drug Courts, concluding once again that Drug Courts reduce recidivism and cut crime. The report validated existing research that Drug Courts have up to a 26 percent lower rate of recidivism than comparison groups.

Now more than ever we must focus on proven programs that guarantee financial returns and measurable success. There is simply no better investment this Congress can make than Drug Courts. Drug Courts have been proven through rigorous scientific research to decrease crime, save taxpayer dollars, rehabilitate offenders, and restore families and communities. No other criminal justice or behavioral healthcare program has a comparable record of success nor such strong bipartisan support in Congress. One would be hard pressed to identify another federal program that has been as avidly endorsed and sustained by States and counties. Supported by policy analysts on both ends of the political spectrum, Drug Courts offer a roadmap for a practical, evidence-based and fiscally conservative drug policy that works.

I strongly urge an investment of \$45 million for the Drug Court Discretionary Grant Program and \$4 million for Veterans Treatment Courts at DOJ.

National Association of Marine Laboratories

PRESIDENT
Jo Ann Leong
Hawaii Institute of Marine Biology
University of Hawaii - Manoa
46-007 Liliupuna Road
Kane'ohe, HI 96744
p 808-236-7401 f 808-236-7443
joannleo@hawaii.edu

CHAIRMAN
COMMITTEE ON PUBLIC POLICY
Nancy N. Rabalais, Ph.D.
Executive Director and Professor
Louisiana Universities Marine
Consortium
8124 Hwy. 56
Chauvin, LA 70344
nrabalais@lumcon.edu

PAST PRESIDENT
Ivar Babb
National Undersea Research Center
University of Connecticut, Avery
Point
1080 Shennecossett Road
Groton, Connecticut 06340
p 860-405-9119 • f 860-445-2969
ivar.babb@uconn.edu

SECRETARY/TREASURER
Alan M. Kuzirian
Marine Biological Laboratory
7 MBL Street
Woods Hole, MA 02543
p 508-289-7480 • f 508-289-7900
akuziria@mbi.edu

Testimony of Dr. Jo Ann Leong
Professor and Director, Hawaii Institute of Marine Biology
University of Hawaii
On behalf of
The National Association of Marine Laboratories
Before the
Commerce-Justice-Science Appropriations Subcommittee
Committee on Appropriations
House of Representatives
Washington, D.C.
March 21, 2013

Mr. Chairman, Ranking Member Fatah and Members of the Subcommittee, my name is Jo Ann Leong and I am the director of the Hawaii Institute of Marine Biology at the University of Hawaii. I submit this statement as President of the National Association of Marine Laboratories (NAML). NAML recommends the following actions to help maintain the health of the nation's ocean, coastal, and Great Lakes research and education enterprise:

- Maintain strong support for extramural investigator-initiated research and education programs within NSF, NOAA and NASA;
- Support the NOAA Science Advisory Board's recommendations for increased use of extramural research programs as part of the effort to strengthen the health of the NOAA R&D portfolio;
- Support efforts to incorporate NAML labs as sites for complementary marine and coastal networks to allow for the sharing and integration of data and observations leading to more cost effective research, increased access to valuable technical assistance, and an improved understanding of the relationships among and between multiple ecosystems; and
- Support an innovative and cost saving national partnership effort to co-locate federal scientists and their research infrastructure at NAML sites and facilities.

On behalf of my fellow marine lab directors, I wish to thank this subcommittee for the long standing support it has provided for ocean, coastal, and Great Lakes research and education through the National Science Foundation (NSF), the National Oceanic and Atmospheric Administration (NOAA), and the National Aeronautics and Space Administration (NASA). NAML is a nonprofit organization of member institutions representing coastal, marine, and Great Lakes laboratories in every coastal state, from Guam to Bermuda and Alaska to Puerto Rico. Member laboratories serve as unique "windows on the sea," connecting

The National Association of Marine Laboratories (NAML) is a nonprofit organization of member institutions representing coastal, marine, and Great Lakes laboratories in every coastal state, stretching from Guam to Bermuda and Alaska to Puerto Rico. Members serve as unique "windows on the sea," providing information on the rich environmental mosaic of coastal habitats as well as offshore oceanic regions and the Great Lakes. NAML member laboratories conduct research and provide a variety of academic, education and public service programs to enable local and regional communities to better understand and manage the ocean, coastal and Great Lake environments. NAML is comprised of three regional associations: the Northeastern Association of Marine and Great Lakes Laboratories (NEAMGLL); the Southern Association of Marine Laboratories (SAML); and the Western Association of Marine Laboratories (WAML).

www.NAML.org

National Association of Marine Laboratories

scientists and citizens with the rich environmental mosaic of coastal habitats and offshore oceanic and Great Lakes regions. NAML laboratories conduct research and provide academic, education and public service programs to enable local and regional communities to better understand and manage their ocean, coastal and Great Lakes cultural and natural resources.

The Role of Marine Laboratories in the Nation's Research and Education Enterprise --

Ocean, coastal and Great Lakes marine laboratories are vital, cost-effective, community-based "windows on the sea." They connect communities with cutting edge marine, coastal and social sciences, providing thousands of students and citizens with meaningful, science-based learning experiences. The member institutions of the National Association of Marine Laboratories (NAML) work together to improve the quality, effectiveness and relevance of ocean, coastal and Great Lakes research, education and outreach. NAML labs provide reliable and relevant information to support wise local coastal management and the understanding and protection of natural resources on a national basis. In particular, NAML seeks to:

- Promote and support basic and applied research of the highest quality from the unique perspective of coastal laboratories;
- Encourage wise utilization and conservation of marine and coastal habitats and resources using ecosystem-based management approaches;
- Recognize, encourage and support the unique role that coastal laboratories play in conducting education, outreach, and public service;
- Promote efficient exchange of information and develop collaborations among NAML member institutions and with government agencies; and
- Support vital coastal observing systems that collect front line data needed to improve predictions of natural and man-made disasters.

Oceans, Coasts, and Great Lakes are Vital for Economic Growth and the Well-being of the Nation --

The ocean is a major economic asset for coastal and land-locked nations. For example, in the U.S. and using 2010 statistics, 52% of the population lived in coastal watershed regions generating nearly 60% of the nation's GDP in 2010. Most imported goods (over \$1.2 trillion/yr.) and exports moved through coastal waterways and ports. Commercial fishing generated over \$32 billion in income and more than one million jobs, while recreational fishing supported \$19 billion in income and millions of additional jobs. Over 25% of U.S. domestic oil was produced from coastal and offshore waters. Oil refineries and wind farms, military installations and assets, rail and road networks, all crucial for national security, energy, commerce, and transportation, are concentrated along coasts. In our globally connected world, land-locked nations derive many benefits from the ocean such as general commerce and ocean products, and are impacted by the ocean's influence on the distribution of rainfall and heat.

Meeting stewardship responsibilities for the oceans, coasts, and the Great Lakes requires a robust ocean and coastal science and education enterprise. Coastal areas face challenges that threaten our fisheries resources, impact recreational and commercial resources and impact ecosystems. The Deepwater Horizon oil spill in the Gulf of Mexico and its continuing impact on the natural resources of the region illustrates the need for a robust and responsive ocean and coastal sciences enterprise. We must reinvest in the nation's research enterprise that has been responsible for our long-term prosperity and technological preeminence through interdisciplinary research spanning a landscape of disciplines, from physics to geology, chemistry to biology, engineering to social sciences, and modeling to observation.

National Association of Marine Laboratories

Recommendations Regarding Federal Marine and Coastal Research and Education --

NAML believes that research and education programs at the major federal science agencies with marine portfolios — including the National Science Foundation (NSF), the National Oceanic and Atmospheric Administration (NOAA), and the National Aeronautics and Space Administration (NASA) — should be viewed as priority investments in the future health and well-being of the Nation. While much attention has been justifiably focused on the need for our Nation to continue its support of premier basic research programs, it is equally important to maintain strong support for mission-oriented ocean, coastal, and Great Lakes research, observing, and monitoring programs. Programs that enhance agency internal research capabilities and support the extramural community in competitive, merit-based research provide highly cost-effective returns on investment and distribute economic and societal benefits over a broad array of communities.

National Science Foundation – NSF funds vital basic research that enhances the public understanding of the Nation's oceans, coasts, and Great Lakes. NSF also supports science, engineering and education to inform the societal actions needed for environmental and economic sustainability and sustainable human well-being. A sustainable world is one in which human needs are met equitably and without sacrificing the ability of future generations to meet their needs. Meeting this challenge requires a substantial increase in our understanding of the integrated system of society, the natural world, and the alterations humans bring to Earth. NSF's Science, Engineering, and Education for Sustainability (SEES) initiative (including efforts such as the Coastal SEES initiative, ocean acidification, dimensions of biodiversity, sustainable energy pathways, water sustainability and climate, etc.) is an example of how this vital need is being met. Research in this area as well as in other ocean and coastal areas is supported via a highly competitive, merit-based process through a variety of modes of support at NAML labs involving individual investigators, small interdisciplinary teams of researchers, and students.

NAML is particularly supportive of the creation of new research networks that connect NAML labs and other entities in ways that would further enhance other ecosystem networks supported by NSF. NAML believes that research infrastructure support is important and needed to move the research enterprise forward and therefore we continue to support the longstanding modest program that provides competitive support via the Field Stations and Marine Laboratories (FSML) program. On the broader issue of national infrastructure support, NAML is concerned, however, that in an era of particularly scarce resources, an appropriate balance must be achieved that protects as much as possible that part of the portfolio that supports the actual conduct of research and training so that it does not become overshadowed by larger scale infrastructure efforts.

National Oceanic and Atmospheric Administration – NOAA is a critical federal leader in ocean, coastal and Great Lakes research. NOAA's extramural support for research and education at marine labs and universities greatly expands its access to world-class expertise and unique facilities, complementing and expanding the work carried out within NOAA labs. NOAA's extramural partnerships contribute invaluable information to our coastal resource managers. These include: the National Sea Grant College (NSGC) Program and Coastal Services Center; Aquaculture Initiatives; Prescott Marine Mammal Program; Highly Migratory Shark Fishery Research Program; NOAA Cooperative and Joint Institutes; the Integrated Ocean Observing Systems; NOAA's Center for Sponsored Coastal Ocean Research harmful algal bloom, hypoxia,

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and ecological forecasting initiatives; the National Estuarine Research Reserve System; the National Marine Sanctuary Program; and NOAA's Office of Education.

NAML strongly supports recent recommendations made to the NOAA Science Advisory Board that calls for priority support for NOAA extramural programs. Increased extramural research enables NOAA to leverage its R&D investment with the resources of the nation's leading university scientists resulting in greater and faster scientific advances at lower costs. A predictable and reliable partnership with the extramural research community is critical to NOAA's long-term success. As available resources become scarcer and major program reorganization is being considered, NOAA should enhance its partnership with the extramural research community in creative and innovative ways. NOAA should expand its efforts to colocate agency research staff and infrastructure at non-Federal marine labs. Such actions will not only result in significant cost savings, achieve a greater return for its investment, and increase scientific collaborations and productivity. A robust NOAA budget directly coupled with solid support for extramural partnerships is essential for NOAA to serve national needs.

National Aeronautics and Space Administration – Part of NASA's mission is to develop an understanding of the total Earth system and the effects of natural and human-induced changes on the global environment. Oceans play a major role in influencing changes in the world's climate and weather. Long-term ocean data from satellites make it possible to employ modeling techniques for global mapping of seasonal changes in ocean surface topography, currents, waves, winds, phytoplankton content, sea-ice extent, rainfall, sunlight reaching the sea, and sea surface temperature. Studying these patterns at a global scale can help forecast and mitigate the effects of floods and drought. Ocean observing satellite images tell us about the most fundamental climate changes. Satellite data have improved forecasting model capabilities to predict events such as El Niño and other global and regional climate cycles. Expanding NASA extramural support will further develop the ability to better predict ocean phenomena.

Education, Diversity and an Ocean Literate America -- The U.S. continues to be at risk with respect to student achievement in science, technology, engineering and math among industrialized nations, as well as, emerging industrializing nations. Therefore, it is critically important that we improve ocean literacy and workforce development among all sectors of our diverse nation. NAML labs seek to expand the engagement of individuals from groups that have been historically under-represented in ocean research, education and outreach through their own and university programs at marine laboratories. This is particularly important in fulfilling the goal of achieving a diversified STEM pipeline for future science and ocean workforce needs. Marine laboratories play an important role in formal and informal education and workforce development by providing students with a place to learn. Marine labs serve as primary training grounds for experiential ocean education and are committed to enhancing diversity within the field of ocean, coastal and Great Lakes research and education. By fostering relationships with community colleges and minority-serving institutions (MSIs), marine labs provide distinctive learning opportunities for underrepresented groups, allowing students to achieve a greater understanding of oceans and coastal ecosystems and providing them with a sense of stewardship.

NAML laboratories continue to strongly support partnerships with Federal agencies to address the ocean education needs of the Nation. These include the NSF's Louis Stokes Alliance for

National Association of Marine Laboratories

Minority Participation, Centers for Ocean Science Education Excellence, Research Experiences for Undergraduates, and Research on Learning in Formal and Informal Settings programs; NOAA's Expanding Partnerships Program in the NOAA Education Office and the National Sea Grant College Program. The importance of marine labs in support of coastal states' Environmental Literacy Plans is essential in developing a literate public. Investment is needed today in coastal, ocean, and Great Lakes education programs at NAML labs that support formal and informal learning at all age levels, by all disciplines, and for all Americans.

On behalf of my colleagues at NAML, thank you very much for the opportunity to express our concerns. We would be happy to provide additional information if it would be helpful to the Subcommittee.

**TESTIMONY OF TERESA HUIZAR,
EXECUTIVE DIRECTOR, NATIONAL CHILDREN'S ALLIANCE**

for the

**US HOUSE OF REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS
SUB-COMMITTEE ON COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES**

MARCH 21, 2013

Chairman Wolf, Ranking Member Fattah and Members of the Subcommittee:

Thank you for the opportunity to provide testimony regarding the funding priorities of the House Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies.

National Children's Alliance is the national association and accrediting body for, as well as a provider of training and technical assistance to, more than 750 Children's Advocacy Centers throughout the US. We empower local communities to respond to child abuse by providing grants for the start-up and development of Children's Advocacy Centers which coordinate a multidisciplinary team for the investigation, prosecution, and treatment of child abuse. Funded through the Victims of Child Abuse Act, these Children's Advocacy Centers served more than 286,000 child victims of abuse throughout the U.S. in 2012; 2/3 of whom were victims of sexual abuse. As you again begin drafting your Subcommittee's Fiscal Year 2014 Appropriations bill, I respectfully urge you to once again fund the Victims of Child Abuse Act program at level funding of \$19 million in the Department of Justice's Office of Justice Programs, Juvenile Justice Account.

Child Sexual Abuse

Children of every gender, age, ethnicity, socioeconomic status, and family structure are at risk for sexual abuse. Child sexual abuse is a crime perpetuated by silence and secrecy. Isolation, whether within a family or by community, adds significant risk for sexual abuse. Children who live in rural areas, for example, are almost 2 times more likely to be identified as victims of child sexual abuse.¹

Understanding the scope of the problem also requires understanding that child sexual abuse exists on a continuum of deviant and harmful behavior by the perpetrator that begins on one end with secretive and furtive victimization, slides into amateur or professional photo-documentation of that abuse primarily for the sexual gratification of the offender, may move toward commercialization or public sharing of those images with other offenders, and on the far end of that continuum may include prostituting or trafficking the child. And, of course, a child may experience one, all, or some combination of these forms of child sexual abuse.

Responding to Child Abuse and the Role of Children's Advocacy Centers

Children's Advocacy Centers play a key role in the investigation and prosecution of child abuse cases and in the healing of victims. Children's Advocacy Centers are child-friendly facilities in which a multidisciplinary team comprised of law enforcement, child protective services, prosecutors, victim advocates, medical practitioners, and mental health professionals convenes and coordinate its efforts to investigate and prosecute child abuse cases while protecting children and providing needed treatment to victims. Across the United States, there are more than 750 Children's Advocacy Centers, which together served more than 286,000 child victims of abuse in 2012 alone.

¹ Sedlack, et al 2010.

The majority of these Children's Advocacy Centers were founded after the passage of the Victims of Child Abuse Act in 1990; which was an important part of Congress' efforts to improve the investigation, prosecution, and treatment of child abuse. Monies appropriated by Congress, each year since 1992, have improved the response within existing Centers, while aiding the development of new Children's Advocacy Centers in areas previously underserved. This much appreciated modest federal investment has been used to leverage state funding, private foundations, and local community donors.

This investment has yielded significant returns. The model of comprehensive care for child abuse victims has significant evidence of its efficacy. Independent research has found that child abuse cases coordinated through a Children's Advocacy Center have:

- a shortened length of time to disposition²;
- increased rates of prosecution³;
- more satisfaction on the part of child victims and their non-offending caregivers⁴;
- higher levels of service provision for medical evaluations; and
- increased referrals for mental health treatment than non-CAC cases⁵.

In short, the multidisciplinary team approach has shown that it is possible to reduce trauma to child victims of abuse while improving the legal outcome of cases and holding offenders accountable. And, at a time when financial resources are limited at every level of government, Children's Advocacy Centers have been demonstrated to *save on average over \$1,000 per child abuse case* compared to non-CAC communities⁶.

The Victims of Child Abuse Act

Sadly, this effective and efficient response is not available to every child sexual abuse victim in the U.S. Currently, abused children in 2,104 counties in the U.S. have access to the services of a Children's Advocacy Center. Meaning that, abused children in more than 1,000 counties have no access to this comprehensive care. Indeed, those areas that are underserved are the most rural, most geographically isolated, and the most resource-poor parts of our country. But, these children are not simply Virginia's children, or Pennsylvania's children, or Kentucky's children: they are America's children. Indeed, the Victims of Child Abuse Act was conceived by Congress on a bipartisan basis to create and sustain a

² Walsh, W.A., Lippert, T., Cross, T. P., Maurice, D. M. & Davison, K. S. (2008). How long to prosecute child sexual abuse for community using a children's advocacy center and two comparison communities? *Child Maltreatment*, 13(1), 3-13.

³ Smith, D. W., Witte, T. H., & Fricker-Elhai, A. E. (2006). Service outcomes in physical and sexual abuse cases: A comparison of child advocacy center-based and standard services. *Child Maltreatment*, 11(4), 354-60

⁴ Lalayants, M., & Epstein, I. (2005). Evaluating multidisciplinary child abuse and neglect teams: a research agenda. *Child Welfare*, 84(4), 433-58.

⁵ Smith et al 2006.

⁶ Formby, J., Shadoin, A. L., Shao, L, Magnuson, S. N., & Overman, L. B. (2006). Cost-benefit Analysis of community responses to child maltreatment: A comparison of communities with and without Child Advocacy Centers. (Research Report No. 06-3). Huntsville, AL: National Children's Advocacy Center

support system for every law enforcement officer and prosecutor combating child abuse across the nation, while also ensuring a network of care for the victims.

Children's Advocacy Centers are also uniquely equipped to be the first point of contact for victims of child trafficking. Recent research indicates that "one of the major ways that officers [reported] compromising previous potential human trafficking investigations was through poor interviewing of victims."⁷ In that same report, researchers noted that "human trafficking victims who suffer from trauma may require multiple interviews before they can accurately discuss the victimization they experience."⁸ For more than 25 years, Children's Advocacy Centers have proven their forensic interviewing techniques, and trauma-focused intervention services, help victims through the process.

Beyond intervention services for victims and their families, Children's Advocacy Centers also provide training to their multidisciplinary team members. Last year, National Children's Alliance, their Children's Advocacy Center members and partners, provided training to more than 46,600 child abuse professionals. Investigating, prosecuting, and treating child abuse is complex and specialized work that requires highly trained professionals and access to continuing education for those professionals. Because 98% of child abuse investigations and prosecutions occur at the state/local level, training resources using federal funds should likewise be driven down to this level, and the Victims of Child Abuse Act funding supports this vital training.

However, this network was deeply threatened last year when, for the first time since 1994, funding for the Victims of Child Abuse Act was eliminated from the President's FY13 budget. Fortunately, Congress acted and restored these funds, thereby ensuring needed victim services.

We understand that the past few budget years, and current budget climate, have forced increasingly difficult choices on Congress and the Administration and are deeply grateful the Victims of Child Abuse Act continues to receive funding. This modest federal funding investment leverages Children's Advocacy Centers as a vital resource to law enforcement and prosecutors, ensuring that our communities are safer and offenders are held accountable.

Services for Child Sexual Abuse Victims

While child abuse investigations are important to the safety of victims and the accountability of offenders, we must also help victims learn to cope with the trauma. Child sexual abuse has well-documented life-long effects. Victims of child sexual abuse are more likely than their non-abused counterparts to become pregnant as teens, to drop out of high school, to abuse substances, to engage in self-destructive and risk-taking behavior, and to experience anxiety and depression. As adults, these individuals have increased morbidity and mortality, suffering from a host of physical and mental

⁷ Farrell A., McDevitt J., Pfeffer R., Fahy S., Owens C., Dank M., Adams W. (2012). Identifying Challenges to Improve the Investigation and Prosecution of State and Local Human Trafficking Cases. Northeastern University's Institute on Race and Justice and the Urban Institute's Justice Policy Center, pp 96-97.

⁸ *Ibid.*

ailments at higher rates than their non-abused peers.⁹ Moreover, their own children are more likely to suffer sexual abuse during the course of their lifetimes than other children. This is truly the saddest possible cycle of abuse.¹⁰

This host of maladies is the result of the trauma caused by abuse. Child abuse victims experience rates of trauma symptoms (hyperarousal, fear, sleep disturbances, anxiety, depression) at rates verging on those experienced by war veterans. Fortunately, much has been learned over the past 15 years about successfully treating trauma in children. Every child who has been the victim of abuse deserves to be assessed to see if they would benefit from mental health treatment, and if so, to have it provided to them promptly.

Abused children served within Children's Advocacy Centers have access to such trauma-focused, evidence-supported mental health treatment. For the over 286,000 children served within Children's Advocacy Centers last year, there is no doubt that the care they received was improved and suffering they experienced was reduced for having had access to such treatment.

In Summary

Child sexual abuse is a far too common experience for America's children. And, child sexual abuse is preventable. More than 2 decades of research reflects the effectiveness of child sexual abuse prevention and body safety information for children. Last year alone, Children's Advocacy Centers, provided such information to more than 500,000 individuals.

One of the most effective prevention and response systems is available through Children's Advocacy Centers. There are more than 750 such centers throughout the U.S. that have been proven to be cost-effective and efficient in coordinating the investigation, prosecution, and protection of children while ensuring that child victims of abuse receive effective treatment. While the investigation and prosecution of child abuse cases is important in holding offenders accountable, this alone is not sufficient to help victims heal. Victims require trauma-focused, evidence-supported mental health treatment in order to heal.

We urge your strong support for funding the Victims of Child Abuse Act at \$19 million for FY14 to provide valuable assistance to law enforcement, keep communities safer, and strengthen justice and healing for victims. Thank you.

⁹ Dube S.R., Anda R.F., Whitfield C.L., Brown D.W., Felitti V.J., Dong M., Giles W.H. (2005). Long-term consequences of childhood sexual abuse by gender of victim. *American Journal of Preventive Medicine*, 28 (5), pp. 430-438.

¹⁰ Penelope K. Trickett, Jennie G. Noll and Frank W. Putnam (2011). The impact of sexual abuse on female development: Lessons from a multigenerational, longitudinal research study. *Development and Psychopathology*, 23, pp 453-476 doi:10.1017/S0954579411000174



**Official Written Testimony for programs under the National Oceanic and Atmospheric
Administration (NOAA) for Fiscal Year 2014**

**Submitted To
Subcommittee on Commerce, Justice, Science and Related Agencies
House Committee on Appropriations
United States House of Representatives, Washington, DC**

**Submitted By
National Estuarine Research Reserve Association
Rebecca K. Roth, Executive Director
March 21, 2013**

The National Estuarine Research Reserve Association (NERRA) is a not-for-profit scientific and educational organization dedicated to the protection, understanding, and science-based management of our nation's estuaries and coasts. Our members are the 28 reserves that make up the National Estuarine Research Reserve System (NERRS). Established in 1987, NERRA facilitates its members' mission to protect our nation's estuaries and to promote conservation-based research, education, and stewardship through the reserves. For Fiscal Year 2014, NERRA strongly recommends the following reserve system programs and funding levels within the National Oceanic and Atmospheric Administration (NOAA):

NERRS Operations	\$22.3 million
NERRS Procurement, Acquisition, and Construction (PAC)	\$1.69 million

Additionally, NERRA also requests appropriation language directing NOAA to ensure that every reserve will get no less than the FY12 allocation. This will enable all reserves to meet obligations for core operations associated with research, education, stewardship, and coastal training responsibilities.

NERRS are 28 protected estuaries – home to our most productive habitats and populated communities – that support effective coastal resource management, research, and education to meet the national interest as mandated by Congress in the Coastal Zone Management Act (CZMA) of 1972. The states have been entrusted to operate and manage NOAA's program in 22 states and Puerto Rico where over 1.3 million acres of land and water are protected in perpetuity. What sets this program apart from other place-based federal programs, like the National Marine Sanctuaries or National Wildlife Refuges for example, is that the reserves manage a federal partnership program, implemented locally by states or universities.

NERRS assists our coastal communities, industries and resource managers to enhance coastal resiliency in a changing environment. Through science-based management of these protected areas, NERRS provides numerous benefits to communities such as improved water quality, increased flood control, and buffers from storms. NERRS is a leader in coastal monitoring that

provides immediate and long-term data to understand harmful algal blooms, assess water quality, identify habitat impacts from changing sea levels, aid in weather forecasting, and improve response to storm surges and inundation.

The reserves have a tremendous positive impact on our economy including work to maintain clean water, keep the seafood and fishing industry viable, and provide communities with practical help and science-based information to address coastal hazards and maintain tourism. Estuaries, where rivers meet the sea, provide nursery ground for 2/3 of commercial fish and shellfish: in NERRS states, the shellfish (wholesale market value) and seafood industry (total sales generated by the seafood industry) contributed over \$2.7 billion to the economy in 2010 (Source: National Ocean Economic Program and NOAA Fisheries, Office of Science and Technology). Protection of these important estuaries within the NERRS can have a significant impact on specific species. For example, the Apalachicola Reserve in Florida is one of three reserves in the state: approximately 90% of Florida's oyster harvest and 10% of US total harvest comes from Apalachicola Bay (Source: Wilber, 92).

The work at each reserve goes beyond its property boundaries and creates a number of environmental and economic benefits for the communities and regions where they exist. For example, in 2010, NERRS coastal counties provided 4.4% of total wages earned in the US and 4.2% of the nation's jobs: contributing over \$26 billion in economic output (measured in gross state product) and supporting more than 468,000 jobs in ocean-dependent industries (Source: Bureau of Labor Statistics; NOAA).

About the National Estuarine Research Reserve System

Since 1974, beginning with the designation of the South Slough National Estuarine Research Reserve in Oregon, the coastal states and the federal government have collaborated to create a unique network of estuarine areas protected for long-term research and education. The NERRS added its 28th reserve on Lake Superior, Wisconsin in October 2010. Currently, NOAA is working with Hawaii to designate its 29th reserve.

Pursuant to the CZMA, each reserve is chosen because it is a representative estuarine ecosystem able to contribute to the biogeographical and typological balance of the NERRS and because the area within the reserve is protected in perpetuity and is available for suitable public purposes such as education and interpretive use. The reserves are a network of protected areas established for long-term research, education, training, and stewardship.

The NERRS's priorities are developed through a collaborative approach between the states and NOAA to address both national and local concerns. The reserves have a mandate pursuant to Section 315 of the CZMA to support the coastal states through research and education as the states address today's most pressing coastal issues such as impacts from changes in sea and lake levels and increased nutrient loading. The reserves conduct research, monitoring, restoration, education, and training designed to improve our understanding and management of coasts and estuaries. The reserves are public places that have significant local, regional, and national benefits because the lands are publicly owned and function as living laboratories and classrooms that are used by scientists, decision makers, educators, and people of all ages. They are located in pristine coastal areas that serve as "sentinel sites," places where early indicators of environmental change are scientifically measured to provide up-to-date information to local

officials and the public to support environmental decision-making, and inform assessment of trends at the regional and national levels.

National Estuarine Research Reserve System (NERRS) Operations

NERRA requests that program operations be funded at a level of \$22.3 million, an amount level with the Congressional Appropriations Act FY12 level. This funding will be shared by the 28 programs to enable the NERRS to manage and maintain healthy estuaries. Healthy estuaries support fishing, seafood, ecotourism, recreation, clean water, and communities. Beyond the economic impact to our National, State, and local economies, reserves have national infrastructure that support bringing science to the management of our coasts and helping our communities prepare for weather-related disasters. In the aftermath of Superstorm Sandy, the Jacques Cousteau Reserve in New Jersey is cited by CNN as being “a natural sponge...for absorbing storm and tidal surges.”(November 3, 2012). NERRS supports local government and community planning initiatives by providing training to local officials and residents about critical resource management issues such as impending hazards, storm water control, shoreline management, and habitat restoration. These local planning initiatives are designed to help people on the ground and to get resources in the hands of the community—all of which amount to a greater than \$13.4 million offset annually. This was also recently evidenced in the Deep Water Horizon Oil Spill of 2010, a coastal area that is home to five reserves. We know that the billion dollar tourism and seafood industries depend upon on clean water, and during the Deep Water Horizon Oil Spill crisis the communities and industries along the Gulf Coast relied on disaster support efforts including data supplied by some of the five Gulf Coast National Estuarine Research Reserves, some of which continues today.

Each reserve receives operation funds from NOAA that are matched by the states and are used to leverage significantly more private and local investments that results in each reserve having on average more than five program partners assisting to implement this national program. In addition, the program significantly benefits from volunteers that are engaged in habitat restoration, education and science which offset operation costs at reserves by donating thousands of hours. Between FY2006 and FY2010, volunteers have contributed more than 460,400 hours to the NERRS. In FY2010 volunteers contributed more than 100,000 hours to the NERRS (Source: NOAA).

NERRS have made countless economic contributions to their local communities, states, and the nation. In the category of eco-tourism, more than 2 million people annually visit the NERRS: an estimated more than \$20 million is generated annually in direct benefit from these visitor use opportunities (estimated using federal, state, and local park entry fees). Visitors to our reserves walk the trails, paddle the waterways, bird watch, snowshoe, and participate in activities and events at each of our 28 reserves.

In 2011, NERRS contributed more than \$10 million to science and research. One example of this is NERRS water and weather monitoring programs are used at the local, state, and national levels to support assessment of water quality and guide and track remediation strategies, aid in weather and marine forecasts, support emergency response, and aid the water dependent and insurance industries. NERRS land conservation ensures that 1.3 million acres of coastal property worth

more than \$6.5 billion are protected. (Estimated based on the average cost of federal investment per acre of land added to reserves over the last ten years.)

In addition, NERRS strategically contributes more than \$4.9 million annually in education relief offsets to communities that face tight budgets in meeting the needs of local school districts, educating over 83,000 children annually through school based programs grades K-12. This is a major benefit in some communities where local school districts have been forced to cut programs in these economic times. Through its *Estuaries 101* curriculum, reserves prepare the next generation workforce in the key disciplines of science, technology, engineering and math (STEM education).

NERRS Procurement, Acquisition, and Construction (PAC)

NERRA requests \$1.69 million for land conservation and facilities to maintain, upgrade, and construct reserve facilities and acquire priority lands. This competitive funding program is matched by state funds and has resulted in not only the preservation of critical coastal lands as described above, but also in the increase of construction jobs. For example NERRS creates more than 60 jobs for each \$1 million of federal construction (PAC) money spent. In addition, NERRS leveraged investments of more than \$114 million to purchase 30,000+ acres of coastal property over the last 10 years. A recent assessment of construction and acquisition priorities at the reserves shows that the NERRS have needs for more than \$60 million for Fiscal Years 2011 through 2015.

Support Requested for Coast and Ocean and Management

NERRS are connected to the coast and ocean management work done by its state and federal partners. Specifically, in the states, reserves primary partners are the state coastal management programs in the majority of the states. NERRA requests Subcommittee support for Coastal Zone Management (CZM) grants at \$67 million. In addition, many reserves rely on congressionally appropriated Bay Watershed Estuary Training (B-Wet) funds to augment educational funds. Therefore, NERRA request your support for this program in the appropriation for B-Wet grants. Finally, the reserves depend on NOAA's technical assistance and partnership capacity. NERRA requests support of \$29.2 million for the Coastal Services Center and \$8 million for CZM Stewardship.

Conclusion

NERRA greatly appreciates the support the Subcommittee has provided in the past. This support has been critical to sustain and increase the economic viability of the coast and estuary-based industries. We urge you to give every consideration to these requests as you move forward in the FY 2014 appropriations process. If we can provide any additional information, please contact me at (202) 236-4819 or roth@nerrra.org, or NERRA President David Ruple, manager of the Grand Bay National Estuarine Research Reserve, at (228) 475-7047 or david.ruple@dmr.ms.gov.

Statement of Dr. John Gregory
Chairman, National Space Grant Alliance
Director, Alabama Grant Consortium
House Committee on Appropriations
Subcommittee on Commerce, Justice, Science, and Related Agencies
Friday, March 22, 2013

Mr. Chairman and distinguished Members of the Subcommittee, thank you for allowing me to provide testimony on behalf of the National Space Grant Alliance (NSGA) as you consider funding priorities relevant to the FY 2014 Commerce, Justice, Science, and Related Agencies Appropriations Bill. I am John Gregory, Professor of Chemistry and Materials Science, Director of the Alabama Space Grant and Chairman of the National Space Grant Alliance (NSGA). Today, I write to you in support of the National Aeronautics and Space Administration (NASA) National Space Grant College and Fellowship Program (Space Grant).

NSGA requests that the program be allocated \$40 million in FY 2014 to sustain the activities that have proven successful under the Space Grant Consortia national model. We also request language that directs NASA to release the funding directly to the 52 Space Grant consortia, pending satisfactory performance.

Background. As you may know, Congress established the National Space Grant College and Fellowship Program under Title II of the NASA Authorization Act of 1988. Today, the program is a powerful national network that contributes significantly to building America's science, technology, engineering, and mathematics (STEM) workforce. Through our national network of 1006 colleges, universities, industry, and non-profit affiliates, Space Grant supports and enhances STEM education, research and outreach programs aligned with NASA's and the States' education priorities. In an effort to bring national coherence to our education initiatives, the Space Grant Directors formed the National Space Grant Alliance (NSGA), a non-profit national organization, comprised of 52 Space Grant consortia-located in every state of the country, the District of Columbia, and the Commonwealth of Puerto Rico. NSGA works to: (a) galvanize support and enthusiasm for aerospace education and research; (b) align Space Grant's education and workforce development activities with NASA's mission to "inspire the next generation of explorers," and (c) ensure Space Grant has an appropriate level of financial and programmatic support to accomplish its objectives.

Space Grant plays a unique role among Federal education programs by using the excitement of space, aerospace, and space science to attract, educate and retain students in STEM career pathways and careers. Thus, Space Grant has built an on-going pipeline for NASA and the aerospace industry which is so important to our nation's technological competitiveness. Space Grant also contributes to fields such as earth and geosciences that affect everything from our weather to our supply of food and water, and other STEM areas in which continued advancement is essential to our nation's competitiveness.

Request. As with other programs, Space Grant is currently covered by the FY 2013 Continuing Resolution (CR). The CR funds the program at the FY 2012 level which was an appropriation of \$40 million. The Senate reported version of the FY 2013 CJS Appropriations Bill also contained language regarding the allocation of appropriated funds. Such language remains imperative for the continued success of the Space Grant program nation-wide. In prior years due to Continuing Resolutions, NASA funded Space Grant in two installments. The first was based on the Administration's budget request (Base installment) and the second was based

on the final Congressional Appropriation, which in the past three years exceeded the Request. We thank the Subcommittee for their support. However, in FY 2012, rather than make two "funding installments" to each state based on the final Congressional Appropriation as it had done in the past few years, NASA arbitrarily provided only the base installment to the 52 Space Grant consortia in FY 2012. The result was that: (1) every state program lost at least \$200,000 from what it expected for its programs (all state consortia had to cut back their programs, drastically); (2) NASA used these funds, plus unspent funds from prior years, to forward fund the base installment for about half the states for the following year with FY 2012 appropriations, and (3) about half of the states have not received any funding in FY 2013 to operate their programs. These actions have severely hampered a highly effective national STEM program. Below, I make a few key points that demonstrate the breadth and scope of Space Grant.

Point 1: Space Grant consortia operate a network of more than 1,000 organizations built up over time to support students, teachers and researchers in space, aerospace and earth science research and education activities. Such a network cannot be maintained without appropriate funding. These partners bring matching resources at the level of 1:1. Space Grant's national network is specifically designed to engage some of the nation's most creative and innovative engineers, scientists, and educators in program activities aimed at providing NASA and its supporting industries, research labs and national centers with a highly qualified technical workforce. This national network is truly committed to educating, mentoring, and providing rich experiences that support students through the completion of a STEM degree. As the only nationwide fully-integrated NASA STEM education program, Space Grant's consistent reach into K-12 schools, community colleges, universities, and NASA facilities makes Space Grant NASA's most productive STEM education program. We provide the necessary platform, resources and staffing through a grassroots campaign to inspire young minds, train an evolving workforce, and develop and test cutting edge software and technology.

Point 2: Space Grant has a proven record of attracting students to space, aerospace, earth science and other STEM disciplines and supporting them over time so that they remain in these areas and attain degrees and employment in these fields. It is a very successful pipeline program. We espouse the Administration's goal of demonstrating program metrics and tracking program success. Presently, Space Grant's national network sets the benchmark with longitudinal tracking --- 91% of Space Grant student awardees are now active in STEM careers with NASA or pursuing further STEM education. In 2010 alone, Space Grant actively engaged over 12,400 undergraduate and graduate students in NASA relevant STEM initiatives. Space Grant proactively assisted high-potential young faculty in their path toward becoming NASA Principal Investigators and effective partners with NASA Centers and contractors.

Space Grant accomplishes its goals through a variety of hands-on research, training and education programs including: college-level fellowships and scholarships; interdisciplinary student directed hands-on mission programs and design projects; internships with aerospace and STEM industries, as well as with NASA Centers; faculty and curriculum development initiatives; university-based NASA-related research initiatives; and K-12 teacher and student programs.

Point 3: Space Grant operates in every state and provides on-going opportunities throughout the nation in communities that might otherwise be left out of NASA programs. One of Space Grant's primary activities is providing resources to enable students to engage in study and research projects that would not be available to them without Space Grant support. In

2009 alone, the SG network created and/or revised 179 STEM courses/curricula. In any given year, over 5,000 students receive direct funding from Space Grant; of these 4,024 students received a “significant” experience or support: greater than \$5,000 or more than 160 contact hours.

The Space Grant student-led flight projects initiative is particularly exciting and resulted in 220 projects with participation from 86% of consortia, ranging from scientific rocket and balloon payloads to small satellite initiatives. These projects engaged 2,200 college students, 300 faculty, 190 higher education institutions, over 1,000 pre-college students, 120 pre-college educators, and 90 industry partners. In addition, the roughly \$2 million of federal state-based Space Grant funds supporting these projects was matched by an additional \$2 million from non-federal sources-- for a total investment in student flight projects of \$4 million.

Point 4: Space Grant has a track record of bringing women and other underrepresented groups into STEM degree programs and employment at a time when such groups are needed to meet our nation's demand for a technologically skilled and diverse workforce. Of the 1,006 affiliate partners, 20% are Minority Serving Institutions and 17% are Community/2-Year Colleges. Of all the student participants in higher education Space Grant projects and activities, 26% were underrepresented minorities and 38% were female.

Point 5: Space Grant provides support to teachers and researchers who provide the underpinning for education and training in science, mathematics and engineering and promotes public understanding of, and support for science, research and exploration. Annually, on average, Space Grant programs train over 19,400 educators (K-12 and informal), provide instructional and enrichment activities for 185,700 elementary and secondary students, and engage 146,700 citizens in 286 public STEM programs nationwide.

Alabama's Space Grant Consortium (ASGC). To give you some detailed examples of the impact Space Grant makes at the state level, I will share the accomplishments of ASGC, which is under my direction. In Alabama, as in every other state, each federal dollar is matched by a dollar of non-federal support. Alabama's initiatives are but examples of actions being taken across the nation by the 52 member consortia that make up the national Space Grant network. The Alabama Consortium is comprised of 17 members--- all 7 Ph.D. granting institutions in the state, including 2 HBCU's, plus 2 community colleges, 2 science museums, the Alabama Science Technology and Engineering Coalition (an arm of the State Department of Education), and 5 aerospace engineering firms.

Our mission is: to enable and educate a diverse group of Alabama students to take up careers in space science, aerospace technology and allied fields; to inspire the next generation of space explorers; to bring increased realization of the value of space science and technology to the people of Alabama, and collectively as a member of the National Space Grant network, to play our part in assuring U.S. leadership in space exploration and aerospace technology into the future. Our goals and objectives are achieved through about 50 projects and initiatives across the state, using our members and affiliates to facilitate them. These initiatives are categorized into 5 major areas: 1) Scholarships and Fellowships, 2) Higher Education, 3) Research Experiences, 4) K-12 Outreach and Teacher Training and 5) Public Outreach and Informal Education.

Scholarships and Fellowships. The ASGC Scholarships and Fellowships Program is our largest program in terms of dollars. All 7-research universities in the state participate. Aerospace workforce development is proportionately more important to Alabama's economy than most other states so it makes sense for us to invest here. ASGC has a strong record of supporting

underrepresented minorities and women (40% of awards to minorities and 42% to women), exceeding our objectives of 25% and 40% respectively. In FY11, the total amount of funds distributed to students was \$477,000 (\$255,000 in NASA funds and \$222,000 in non-federal matching). *I should note that as a result of NASA's actions in FY 2012, Alabama (along with other Consortia nationwide) had to cut back drastically its scholarships and fellowships to students. In our case we had to cut the funding in half.*

Higher Education. The Higher Ed portfolio of programs encompasses: 1) New Course Development and 2) Student Satellites Programs or Space Hardware Building programs called SSP's. While the hardware varies greatly from rocket to robots, there are common themes: *interdisciplinary study* (physics, electronics, communication, etc.), *hands-on student-led, expert-mentored space mission experiences* --- design, build, fly, analyze. Students learn teamwork, interdependence, systems engineering, trade-off analysis, public speaking, budgeting, and in some cases, fund-raising. Our current list of 20 Alabama SSP's for FY2011 include a BalloonSat, Moonbuggy and USLI rocket teams at AAMU; BalloonSat, CubeSat and Lunar Regolith/Lunabotics programs at AU; Design/Build/Fly, Lunar Regolith/Lunabotics and two USLI rocket programs at UA; BalloonSat, CanSat (mock-satellite), CubeSat, Moonbuggy and USLI rocket teams at UAH; a USLI rocket program at USA; and a USLI rocket program at TU. We also have two Higher Education programs at two community colleges -- a Moonbuggy team at Beville State and a bridge program with UA to have students work on USLI rockets and Lunar Regolith/Lunabotics at Shelton State. We are also engaged in pedagogy and have added new courses into the undergraduate curriculum. As you may know, adding courses is extremely difficult at U.S. universities. We have done this at 3 universities in the past and it is a testament to the excellence of our faculty instructors.

In 2011, 348 students in Alabama were involved in Space Hardware Building projects. *There were 20 projects at 9 colleges and universities across Alabama. These numbers will be reduced by almost 30% (about 100 students) as we adjust to the loss of the appropriated FY2012 funds as a result of NASA actions.*

Research Experiences. ASGC's research initiatives are *Research Experiences for Undergraduates (REU)* programs at academic institutions and *Research Internships at NASA Centers*. The REU program provides students a window into the world of research via a 10-week paid experience with competitive research mentors. ASGC supports an average of 3-4 interdisciplinary 10 week REU programs per year. These experiences are hosted at research universities, rather than at NASA centers. The average cost per student is about \$3,000. REU students prepare reports, become part of writing teams that publish findings, and present their work in a talk or poster session. REU programs are interdisciplinary and recruit women and underrepresented minorities and act as excellent feeder programs to various STEM graduate programs. The students form a critical link in the pipeline for Aerospace Workforce Development efforts in Alabama. Due to the amount of hours REU students put in, they are now being systematically tracked. Our ASGC NASA Center Research Internships, as well as our hands-on, multi-disciplinary *Student Satellite programs (noted above)* are designed to give students a first look at applied research and development. They must first set goals, develop a plan to achieve them, perform the analytical research into the system design and make difficult trade-offs and solve problems. Then, students must execute their design with real materials and defend its performance to their professional peers. The Space Grant network in Alabama (as in most other states) is capable of delivering programs that integrate research with STEM curriculum and coursework taken by the students. ASGC supports an average of 5 student

interdisciplinary *Research Internships* per year at NASA Centers, including MSFC, GSFC, JPL, GRC and LaRC. This is one of the best ways to prepare students to enter the NASA workforce. Students get a chance to work with NASA scientists and engineers and decide if that is their career of choice. The typical stipend for an Internship is around \$5-6K, with JPL being a more expensive, running up to \$7,000. In FY2011, ASGC supported a total of 35 direct student participants in multidisciplinary REU programs and Internships at NASA Centers.

Public Outreach and Teacher Training. ASGC partners with the Alabama Mathematics, Science, Technology and Engineering Coalition (AMSTEC) for Education to provide new BalloonSat opportunities for Middle School students and educators. BalloonSat events were developed for students to provide an exciting introductory experience to the engineering process in the aerospace world of 'design, build, fly and evaluate.' This activity targets schools having high minority participation and seeks to improve SAT scoring throughout the state in physical science. In FY2011, ASGC supported 3 State Regional Science Olympiad and Science Fairs that are held annually at the lead-institution, UAH, and these events hosted over 1,200 indirect participants. Members of the public from the entire State of Alabama are present at these events.

In FY2011, ASGC funded 25 STEM teacher educator scholarships so they could attend the 2012 Education Summit and STEM Education Forum held at USA, in Mobile, AL. Additionally, ASGC supported in-service and/or pre-service teacher educators to attend two teacher educator workshops (a 3-day event at the annual Space Exploration Educators Conference at JSC, Houston, TX and a 1-day event at the Alabama Science Teachers Association Fall Conference at the McWane Science Center in Birmingham, AL).

Closing Remarks. The above, as I said, are just a few of the many activities in which Space Grant Consortia around the country are involved. Multiplied by 52 state consortia the impact of the NASA Space Grant nationally is broad and deep. Continued Congressional support at the \$40 million dollar level in a manner in which the program has been funded in every year except 2012 will assure continued high level NASA presence and opportunities in every state.

In summary, we are concerned U.S. prominence in science and technology is being challenged on multiple fronts, and NASA, in spite of Congressional support, continues to severely cut back its longest running education program with a proven performance record. Through the National Space Grant Program, NASA has achieved what most other science agencies have not been able to --- create strong partnerships with university faculty, colleges of education, K-12 and business communities in the states; mobilize and immerse S&T faculty in education initiatives; and utilize Agency resources to inspire and motivate the next generation of explorers. Space Grant has delivered a remarkable number of high quality educational experiences for a relatively small NASA investment. Without continued support, National Space Grant College and Fellowship Program will be forced to: (1) reduce affiliates, (2) cut back on programs currently funded in states, (3) reduce student scholarships/fellowships support, and (4) lessen the ability to convince leaders of the impact and importance of NASA and Space Grant in the nation's research and education agenda. Space Grant is a sound investment in America's future and should not be reduced.

Thank you for the opportunity to submit testimony for the record and for your support in past years.

Native American Rights Fund

1506 Broadway, Boulder, Colorado 80302-6296 • (303) 447-8760 • FAX (303) 443-7776

EXECUTIVE DIRECTOR

John E. Schellawski

LITIGATION MANAGEMENT

COMMITTEE

K. Jerome Gottschalk
Natalie A. Landreth
Melody L. McCoy

ATTORNEYS

Any C. Cordalis
K. Jerome Gottschalk
David L. Gower
Melody L. McCoy
Steven C. Moore
Susan Y. Nor
Donald R. Wharton
Heather D. Whiteman Rust Hinn

CHIEF FINANCIAL OFFICER

Michael Kennedy

DIRECTOR OF DEVELOPMENT

Morgan O'Brien

GRANT WRITER/EDITOR

Ray Ramirez

WASHINGTON OFFICE

1514 P Street, NW (Rear)
Suite D
Washington, D.C. 20005-1910
Ph. (202) 783-4166
FAX (202) 822-0088

ATTORNEYS

Richard A. Oest
Joel W. Williams

ANCHORAGE OFFICE

801 B Street, Suite 401
Anchorage, AK 99501
Ph. (907) 276-0680
FAX (907) 276-2466

ATTORNEYS

Heather R. Kendall-Miller
Natalie A. Landreth
Bria C. Dougherty

Website: www.narf.org

TESTIMONY FOR THE RECORD ON THE FY 2014 BUDGET REQUEST FOR DEPARTMENT OF JUSTICE

Submitted to the Subcommittee on Commerce, Justice, Science and Related Agencies, House Committee on Appropriations

By the Native American Rights Fund

March 18, 2013

The Native American Rights Fund (NARF)¹ submits this written statement for the record. We respectfully request this Subcommittee's consideration as you develop the FY 2014 Commerce, Justice, Science and Related Agencies appropriations bill of maintaining funding within the Department of Justice (DOJ), the Office of Justice Program's State and Local Law Enforcement Assistance account, at approximately \$3 million as provided in recent years within assistance to Indian tribes for the Bureau of Justice

¹ Founded in 1970, the Native American Rights Fund (NARF) is the oldest and largest nonprofit law firm dedicated to asserting and defending the rights of Indian tribes, organizations and individuals nationwide. NARF's practice is concentrated in five key areas: the preservation of tribal existence; the protection of tribal natural resources; the promotion of Native American human rights; the accountability of governments to Native Americans; and the development of Indian law and educating the public about Indian rights, laws, and issues.

Assistance's Tribal Civil and Criminal Legal Assistance, Training and Technical Assistance grant program.

Twenty-five Indian Legal Services programs, which are the Indian program components of the Legal Services Corporation, operate in 23 states. They annually provide both civil and criminal legal representation in tribal courts to hundreds of individual Native American clients, including juveniles, who meet federal poverty guidelines.² Legal work encompasses a broad array of cases, including domestic violence, *pro se* assistance, family member prisoner visitation and re-entry, child welfare and adoption, employment and home foreclosure assistance.

In addition to individual representation, the Indian Legal Services programs are currently assisting more than 160 tribes and/or tribal judicial systems in such activities as tribal court development and improvement, development of tribal dispute resolution and peacemaker/mediation systems, drafting of civil and criminal codes and rules of procedure and other structural development for court implementation, and training of tribal court and justice systems personnel and tribal court lay advocates and guardians *ad litem*.

In many instances, these Indian Legal Services programs have been “on the ground” for decades, an integral part of the legal structure of the reservation communities they serve. The programs’ representation of individual tribal citizens and training for and assistance to tribal governments and tribal judicial systems help keep citizens safe, help assure that tribal justice systems are grounded in solid codes and laws so that those communities can better attract business investments, and provide economic opportunities by training tribal citizens to work in the justice system as advocates and judges. The Indian Legal Services programs’ work in developing and strengthening the institutions of tribal justice and creating a solid legal infrastructure on the reservations ultimately builds sustained economic opportunity and growth in those tribal communities.

These Indian Legal Services programs have received grant funding from DOJ’s Office of Justice Programs’ Bureau of Justice Assistance to supplement Legal Services Corporation resources and other federal grant funds in order to expand services to tribal citizens and tribal justice systems. The Native American Rights Fund serves as the administering agency for these grant

² In 2000, Congress enacted the Indian Tribal Justice Technical and Legal Assistance Act (Public Law 106-559), which specifically authorized the Department of Justice to provide grants to “non-profit entities ... which provide legal assistance services for Indian tribes, members of Indian tribes, or tribal justice systems pursuant to Federal poverty guidelines” [emphasis added]. The Indian Tribal Justice Technical and Legal Assistance Act of 2000 was reauthorized through FY 2015 as part of the Tribal Law and Order Act (Public Law 111-211).

funds to the National Association of Indian Legal Services (NAILS), an umbrella association of the Indian Legal Services programs.

Congress appropriated or the Department of Justice awarded the following funds between FY 2003 and FY 2012 to Indian Legal Services programs:

- in FY 2003, \$2 million within DOJ's Edward Byrne Memorial Justice Assistance Grant Program;
- in FY 2005, \$1.73 million, also within DOJ's Edward Byrne Memorial Justice Assistance Grant Program;
- in FY 2010, within a total of \$50 million for assistance to Indian tribes, the Bureau of Justice Assistance (BJA) awarded \$3 million under its newly-established, competitive Tribal Civil and Criminal Legal Assistance, Training and Technical Assistance (TCCLA) grant program, and awarded \$1.25 million to Indian Legal Services for civil legal assistance and \$1.1 million for criminal legal assistance;
- under the FY 2011 Continuing Appropriations Resolution, BJA distributed \$2.9 million in awards under the Tribal Civil and Criminal Legal Assistance, Training and Technical Assistance grant program, of which total BJA awarded \$536,363 to Indian Legal Services for tribal civil legal assistance, and \$1.1 million for tribal criminal legal assistance; and
- in FY 2012, BJA awarded \$850,659 to Indian Legal Services for tribal civil legal assistance, and \$875,000 for tribal criminal legal assistance. Funds for these and other TCCLA awards came from a total of \$38 million appropriated for assistance to Indian tribes within DOJ's State and Local Law Enforcement Assistance account under the FY 2012 Consolidated and Further Continuing Appropriations Act (Public Law 112-55).

BJA released an FY 2013 competitive funding solicitation under TCCLA in early February. The Indian Legal Services programs are currently preparing to submit applications for both tribal civil and criminal legal assistance for the FY 2013 funding cycle.

A few examples of the kind of individual representation and tribal court assistance work done by Indian Legal Services programs include the following:

- **Texas** Rio Grande Legal Aid was able through the grant funding to hire an attorney who is a member of the Kickapoo Traditional Tribe of Texas, speaks Algonquin, the Kickapoo language, and has many connections in

the tribal community. He provides representation on criminal matters to members of the Kickapoo Tribe.

- **California** Indian Legal Services works with the California Tribal Chiefs of Police Association and its individual departments and member tribes, as well as county law enforcement agencies where member tribes are located, on policing in a “Public Law 280” state.
- In **Maine**, the staff attorney for the Native American Unit of Pine Tree Legal Assistance is engaged in ongoing discussions with the directors of the Penobscot Nation Judicial System and the Passamaquoddy Tribal Court System, along with their respective tribal court judges, regarding the requirements of accepting and implementing the Tribal Law and Order Act, particularly its enhanced sentencing authority provisions.
- **Minnesota’s** Anishinabe Legal Services has partnered with the Leech Lake Band of Ojibwe to provide legal representation before the Leech Lake Tribal Court to juveniles under the Bamenim Anishinaabeg Program, a juvenile justice pilot project aimed at providing comprehensive holistic services to at-risk youth residing on the Leech Lake Reservation.
- **Utah** Legal Services assists in Social Security Administration disability cases where tribal members of the Ute and Goshute Reservations were denied disability benefits.

With respect to FY 2014, we anticipate that, as the Administration has for the past couple of years, the FY 2014 budget request may again propose bill language in General Provisions – Department of Justice for several setasides for DOJ funding, including a setaside for tribal criminal justice assistance. Prior years’ bill language for specific amounts - e.g., \$38 million for assistance to tribes provided in the final FY 2012 Consolidated Appropriations Act - or line items would be replaced with these setasides.

Because the Indian Legal Services programs are not tribal governments, and do not want to have to compete with tribes for DOJ funding³, what is most helpful is to have both a specific funding amount for tribal civil and criminal legal assistance, and a reference to the authorizing statute that allows DOJ to award grants for these services (Public Law 106-559).

³ Having to compete with tribal governments for a portion of the overall DOJ funds for Indian Country assistance is, as a policy matter, something that the Indian Legal Services programs have worked hard over the years to avoid, and which led us to get the initial authorizing legislation enacted in 2000, Public Law 106-559.

If the Appropriations Committee should agree with the Department's request for a tribal set-aside, or should provide an overall "lump sum" amount for assistance to Indian Country, we would ask for your consideration of report language that would encourage DOJ to make some funding available to non-tribal governmental entities such as Indian Legal Services programs for the provision of tribal civil and criminal legal assistance services.

Prior years' instructive report language of the Appropriations Committees has directed the Office of Justice Programs to consult with tribal stakeholders in determining how the overall amount of tribal assistance funds will be allocated among the tribal grant programs, and has specifically mentioned tribal civil and criminal legal assistance. That report language – as was earlier bill language – has been helpful in ensuring that the Department of Justice provides some funding to the Tribal Civil and Criminal Legal Assistance, Training and Technical Assistance grant program.

If, in FY 2014, the President requests and Congress approves either an overall sum for assistance to Indian tribes or a tribal set-aside of a percentage of DOJ funding, funding for the Bureau of Justice Assistance's Tribal Civil and Criminal Legal Assistance, Training and Technical Assistance grant program should be maintained at the level of approximately \$3 million provided in recent years.

Indian Legal Services programs have a proven, 45-plus-year track record of cost-effective delivery of legal representation to Indian people, communities, tribes and tribal courts. Since FY 2003, these programs have received funding from the Department of Justice and effectively delivered a broad range of services. Funding of approximately \$3 million should be appropriated in FY 2014, as in recent years, for tribal civil and criminal legal assistance, and tribal court development work, as undertaken by Indian Legal Services programs.

Thank you for your attention to this submission.

Sincerely,

A handwritten signature in black ink, appearing to read "Steven C. Moore", written over a horizontal line.

Steven C. Moore
Senior Staff Attorney

**Outside Witness Testimony in Support of FY 2014 Funding for the
National Science Foundation**

March 21, 2013

Submitted by:
Julie Palakovich Carr
Senior Public Policy Associate
and
Robert Gropp, Ph.D.
Director of Public Policy

American Institute of Biological Sciences
1444 I Street, NW, Suite 200
Washington, DC 20005
Phone: 202-628-1500
Fax: 202-628-1509
E-mail contact: rgropp@aibs.org

Submitted to:
House Committee on Appropriations
Subcommittee on Commerce, Justice, Science and Related Agencies

The American Institute of Biological Sciences (AIBS) appreciates the opportunity to provide testimony in support of fiscal year (FY) 2014 appropriations for the National Science Foundation (NSF).

The AIBS is a nonprofit scientific association dedicated to advancing biological research and education for the welfare of society. AIBS works to ensure that the public, legislators, funders, and the community of biologists have access to and use information that will guide them in making informed decisions about matters that require biological knowledge. Founded in 1947 as a part of the National Academy of Sciences, AIBS became an independent, member-governed organization in the 1950s. Today, AIBS has nearly 160 member organizations and is headquartered in Reston, Virginia, with a Public Policy Office in Washington, DC.

NSF and Innovation

The NSF is an important engine that helps power our nation's economic growth. Through its competitive, peer-reviewed research grants, NSF supports the development of new knowledge that will help to solve the most challenging problems facing society, and will lead to new scientific discoveries, patents, and jobs. The agency's education and training programs are helping to ensure that the next generation has the scientific, technical, and mathematical skills employers are seeking. Investments in research equipment and facilities enable the country to continue to innovate and compete globally.

These efforts, however, require a sustained federal investment. Unpredictable swings in federal funding can disrupt research programs, create uncertainty in the research community, and stall the development of the next great idea.

NSF is a sound investment that pays dividends. The use of peer-review to evaluate and select the best proposals means that NSF is funding the highest quality research.

The research supported by NSF is unique from the science funded by other federal programs. Unlike most federal agencies, which focus on applied research, NSF supports basic research that advances the frontiers of our knowledge about biodiversity, genetics, physiology, and ecosystems. Recent discoveries that stem from NSF-funded research include:

- Development of a robotic fish that mimics live fish behavior. The robot could be used in the future to lead schools of real fish away from dangers such as turbines or oil spills.
- Identification of the mechanisms that keep natural structures, like plant leaves and butterfly wings, clean. This information could be used to prevent fouling of man-made structures.
- Calculation of the impact of bark beetle infestations on a forest's ability to store carbon dioxide. This new method can also be used to assess other economic impacts of forest loss.
- Discovery of the key proteins and enzymes in an insect's outer shell, and identification of which ones break down easily. These insights could be used to create more effective pest control strategies.

Biological Sciences Directorate

The NSF is the primary federal funding source for fundamental research in the non-medical life sciences at our nation's universities and colleges. The NSF provides approximately 62% of extramural federal support for non-medical, fundamental biological and environmental research at academic institutions.

The Biological Sciences Directorate (BIO) funds research in the foundational disciplines within biology. These fields of study further our understanding of how organisms and ecosystems function. Additionally, BIO supports innovative interdisciplinary research that improves our understanding of how human social systems influence – or are influenced by – the environment, such as the NSF-wide Science, Engineering, and Education for Sustainability program. In collaboration with NSF's engineering, math, and physical science directorates, BIO is working to develop new, cutting-edge research fields. For example, the BioMaPS program is accelerating understanding of biological systems, and applying that knowledge to new technologies in clean energy.

Equally important, BIO provides essential support for our nation's place-based biological research, such as field stations and natural science collections. The Long-Term Ecological Research program supports fundamental ecological research over long time periods and large spatial scales, the results of which provide information necessary for the identification and resolution of environmental problems.

The FY 2014 budget should also sustain an effort to digitize high priority specimens in U.S. natural science collections. This investment will help the scientific community ensure access to and appropriate curation of irreplaceable biological specimens and associated data, and stimulate the development of new computer hardware and software, digitization technologies, and database management tools.

The Dimensions of Biodiversity program supports cross-disciplinary research to describe and understand the scope and role of life on Earth. Despite centuries of discovery, most of our planet's biodiversity remains unknown. This lack of knowledge is particularly troubling given the rapid and permanent loss of global biodiversity. A better understanding of life on Earth will help us to make new bio-based discoveries in the realms of food, fiber, fuel, pharmaceuticals, and bio-inspired innovation.

The Major Research Equipment and Facilities Construction account is funding the construction of the National Ecological Observatory Network (NEON). Once completed, NEON will provide the infrastructure necessary to collect data across the United States on the effects of climate change, land use change, water use, and invasive species on natural resources and biodiversity. This information will be valuable to scientists, resource managers, and government decision makers as they seek to better understand and manage natural systems.

STEM Education

NSF plays a central role in science, technology, engineering, and mathematics (STEM) education. Support for the scientific training of undergraduate and graduate students is critically important to our research enterprise. Students recruited into science through NSF programs and research experiences are our next generation of innovators and educators. In short, NSF grants are essential to the nation's goal of sustaining our global leadership in science, technology, engineering and mathematics, and reigniting our economic engines.

NSF's education initiatives support STEM education innovation from elementary school through post-graduate. The Graduate Research Fellowship program is an important part of our national effort to recruit and retain the best and brightest STEM students. The Faculty Early Career Development program (CAREER) supports young faculty who are dedicated to integrating research with teaching and learning.

Conclusion

Continued investments in the biological sciences are critical. Sustained support for NSF will help spur economic growth and innovation, and continue to build scientific capacity at a time when our nation is at risk of being outpaced by our global competitors.

Thank you for your thoughtful consideration of this request and for your prior efforts on behalf of science and the National Science Foundation.



4245 N. Fairfax Avenue NW
Suite 100
Arlington, VA 22203

Tel (703) 841-5300
Fax (703) 841-7400
www.tnc.org

**Official Written Testimony for programs under the National Oceanic and
Atmospheric Administration (NOAA) for Fiscal Year 2014**

Submitted To:

**Subcommittee on Commerce, Science, Justice and Related Agencies
Committee on Appropriations, U.S. House of Representatives**

Submitted By:

**The Nature Conservancy
Kameran L. Onley, U.S. Marine Policy Director
March 21, 2013**

Thank you for the opportunity to comment on the Fiscal Year 2014 appropriations for the National Oceanic and Atmospheric Administration (NOAA). The Nature Conservancy (Conservancy) is a non-profit conservation organization working around the world to protect ecologically important lands and waters for both people and nature.

As the nation enters the FY 2014 budget cycle and another year of fiscal challenges, the Conservancy recognizes the need for fiscal restraint and reiterates our concern that natural resource stewardship programs should not shoulder a disproportionate share of cuts in this budget. Hurricane Sandy and its aftermath have made it clear that addressing coastal resiliency and protecting coastal communities is fundamental to public safety, health, and economic well-being. Many of the NOAA programs highlighted below support the very coastal habitats that serve as natural buffers for storm surge and hurricanes and therefore protect people and property. Now, more than ever, these programs deserve our full support.

Our recommendations this year generally align with the funding levels currently contained in the Senate's FY13 Continuing Resolution. As an organization that prides itself on public-private partnerships with coastal communities and people who make their living from the sea, we strongly believe that the budget levels we support represent a prudent investment in our country's future. It is an investment that not only helps NOAA achieve its most critical missions by catalyzing local and regional action, but also reduces risk and saves money based on tangible economic and societal benefits that natural resources provide each year to the American people.

Fisheries Management The 2007 amendments to the Magnuson-Stevens Fisheries Conservation and Management Act (MSFCMA) were intended to end overfishing in the United States and reduce destructive fishing practices in U.S. waters. Further, it included new provisions that create mechanisms for communities to engage in conservation efforts while securing the contribution of marine fisheries to their local economies. NOAA Fisheries, in implementing the MSFCMA, has made important strides in addressing these challenges and strengthening fisheries management; however, much more needs to be done. To recover fish stocks so that they provide food and jobs to struggling fishermen now and in the future, we need to reduce destructive fishing practices, restore coastal habitats that produce fish, and support the efforts of fishermen and local

communities that depend on fishing – and do so in a way that engages fishermen in collaborative efforts. The following NOAA programs are essential to achieving healthy coastal habitats and continued robust fisheries management.

Fisheries Habitat Restoration. Coastal wetlands and nearshore waters produce the fish and shellfish that feed America. The health of these places is essential to the economic and social well-being of those who live and work in coastal communities. Restoration and protection of natural defenses such as salt marshes, oyster reefs, seagrass meadows, and coral reefs help to provide flood control and prevent erosion to protect our communities from storm surges. Since 2001, The Nature Conservancy and NOAA have partnered through the Community-based Restoration Program (funded under the Fisheries Habitat Restoration line along with the Open Rivers Initiative) to restore the health of degraded habitats in places and ways that benefit not just local marine life, but communities and coastal economies as well.

Through the 130+ community-based projects supported in the first decade of this partnership, NOAA and the Conservancy have helped protect vital coastal and marine habitat, restore species that keep coastal systems healthy, remove invasive species, create shellfish spawning sanctuaries and reestablish water flows to estuaries. Beyond the environmental benefits, these projects show that restoration pays off for coastal communities, producing jobs for direct restoration work and supporting coastal communities through increased fish and shellfish production. A recent economic analysis of oyster reef restoration in the Northern Gulf of Mexico provided compelling evidence for such claims, finding that two reefs totaling 3.6 miles would increase economic output of commercial finfish and crab landings by \$35,000 per year; cut wave height and energy significantly, reducing shoreline erosion and associated damages to private property and public infrastructure; and remove up to 4,160 pounds of nitrogen per year from Mobile Bay's waters.¹

Through our on-the-ground experience, we recommend no less than \$20.7 million for Fisheries Habitat Restoration in FY2014. Moreover, we request that no less than \$10 million be made available for competitive cooperative agreements through the Community-based Restoration Program (CRP). Additional funding beyond cooperative agreements and program administration of CRP should be dedicated to the Open Rivers Initiative.

National Catch Share Program. Catch shares give participating fishermen a stake in the benefits of a well-managed fishery and align the incentives for resource stewardship with the natural incentive for fishermen to increase their earnings with a sustainable business model. Transition to these systems is difficult and getting the design and implementation of these new catch share programs right, including provisions to engage fishing communities, is critical. The Conservancy supports no less than \$25.2 million for the National Catch Share Program.

Annual Stock Assessments. Magnuson-Stevens mandated that annual science-based catch limits be in place in all fisheries to prevent or end overfishing by 2011. While this milestone has been achieved, there is room for continued improvement in fishery data collection and stock assessments. Accurate and timely stock assessments are essential for the sound management of

¹Kroeger, Timm (2012). "Oyster Reef Restoration in the Northern Gulf of Mexico: Ecosystem Services, Economic Benefits and Impacts, and Opportunities for Disadvantaged Coastal Communities." The Nature Conservancy.

fisheries and the sustainability of fishing resources. The Conservancy supports no less than \$68.6 million for annual stock assessments.

Pacific Coastal Salmon Recovery Fund. The Pacific Coast Salmon Recovery Fund (PCSRF) is the most critical federal program addressing major threats to Pacific salmon so that these fish can continue to sustain culture, economies, recreation, and ecosystem health. PCSRF funding is tailored for each state, competitively awarded based on merit, and has funded hundreds of successful, on-the-ground salmon conservation efforts. PCSRF invests in cooperative efforts to conserve species under the National Marine Fisheries Service jurisdiction, and projects are matched at a 3:1 ratio (federal/non federal) and have resulted in significant progress in protecting and restoring salmon across their range. Notably, the PCSRF has catalyzed thousands of partnerships among federal, state, local, and tribal governments, and conservation, business, and community organizations. The Conservancy urges sustaining at least \$65 million for the competitive and proven PCSRF grants program.

Species Recovery Grants. Through this program, NMFS provides grants to states to support conservation actions that contribute to recovery, or have direct conservation benefits for, listed species, recently de-listed species, and candidate species that reside within that state. The Conservancy supports no less than for \$4.3 million for Species Recovery Grants.

Ocean Services Over the years and across many sites, NOAA has been an invaluable partner to the Conservancy. NOAA programs that provide practical, community-oriented approaches to restoration, resource management, and conservation are natural fits for the Conservancy's mission. The Coastal Services Center and National Estuarine Research Reserve programs educate hundreds of local community officials and practitioners on better ways to apply tools and science. In addition, NOAA's data, research, and monitoring of coastal and marine systems directly provide data and decision-support tools that inform the safe operations of industry, prioritize habitats for restoration, and advance science-based management decisions. The following funding recommendations highlight critical programs that support productive coastal communities and healthy coastal and marine environments.

Coral Reef Conservation Program. The decline of coral reefs has significant social, cultural, economic, and ecological impacts on people and communities in the United States and around the world. The Conservancy works with NOAA's Coral Reef Conservation Program under a competitively awarded, multi-year cooperative agreement to address the top threats to coral reef ecosystems: climate change, overfishing, and land-based sources of pollution. Together we develop place-based strategies and resilient marine protected area networks, measure the effectiveness of management efforts, and build capacity among reef managers globally. The Conservancy supports no less than \$26.8 million to provide funding to support the Coral Reef Conservation Program.

Coastal and Estuarine Land Conservation Program. Created by Congress in 2002 and formally authorized in 2009, the Coastal and Estuarine Land Conservation Program (CELCP) program has helped preserve approximately 45,000 acres of America's most important coastal areas. All federal funding for CELCP is leveraged by at least an equal amount of state, local and

private investments. There is significant demand for coastal conservation that is not being met. In the last several years, NOAA has identified and vetted more than \$270 million in coastal projects that are eligible for CELCP program funding. The Conservancy recommends including the FY2012 enacted level of \$5 million to support a program that utilizes both acquisition and conservation easements to protect coastal and estuarine lands considered important for their ecological, conservation, recreational, historical or aesthetic values. Land acquisition or conservation easements acquired with CELCP funds are protected in perpetuity so that they may be enjoyed by future generations.

Regional Ocean Partnerships. Funding will provide support to implement priority actions identified by the Regional Ocean Partnerships, including the Northeast Regional Ocean Council, the Mid-Atlantic Regional Council on Oceans, the South Atlantic Alliance, the Caribbean Regional Ocean Partnership, the Gulf of Mexico Alliance, the West Coast Governors' Agreement on Ocean Health, and the Council of Great Lakes Governors. These multi-state collaborations originated to address regional priorities such as habitat conservation and restoration, energy siting, coastal resilience to severe storms, coastal water quality, and regional data and science needs. Additional funding should be provided to support state and regional engagement in the development of marine planning, including stakeholder processes and consensus building tools, analysis of data and information, and facilitation of broad public participation in the planning process. The Conservancy urges at least \$4 million to advance vital regional ocean and coastal priorities.

National Estuarine Research Reserve System. The National Estuarine Research Reserve System (NERRS) partners with states and territories to ensure long-term education, stewardship, and research on estuarine habitats. Atlantic, Gulf, Pacific, Caribbean and Great Lakes reserves advance knowledge and stewardship of estuaries and serve as a scientific foundation for coastal management decisions. The Conservancy recommends no less than \$22 million in the budget for the NERRS.

National Marine Sanctuaries Program. National marine sanctuaries support economic growth and hundreds of coastal businesses in sanctuary communities, preserve vibrant underwater and maritime treasures for Americans to enjoy, and provide critical public access for ocean recreation, research, and education. Investment in these sites does more than simply protect small areas of the ocean -- it places a down payment for the many Americans whose livelihoods are dependent on a healthy ocean and coasts. The Conservancy supports no less than \$49 million for the National Marine Sanctuaries Program.

Thank you for this opportunity to share with the Committee the Conservancy's priorities in NOAA's FY2014 budget. We would be pleased to provide the Subcommittee with additional information on any of the Conservancy's activities described here or elsewhere. Please contact me (703-841-4229, konley@tnc.org) if you have questions on which we might be of assistance.

Sincerely,



Kameran Onley, U.S. Marine Policy Director

Emily Woglom, Director of Government Relations, Ocean Conservancy
Testimony for the Subcommittee on Commerce, Justice, Science and Related Agencies on
FY 2014 Appropriations for the National Oceanic and Atmospheric Administration

Thank you for this opportunity to provide Ocean Conservancy's recommendations for FY 2014 funding for NOAA. Recognizing that the President's Budget for FY 2014 has not yet been released, we urge Congress to provide an overall funding level for NOAA that both funds the request for NOAA's satellite procurements and restores overall funding for ocean and coastal programs to FY 2010 levels or above. We recommend the following funding levels for specific programs:

Account, Program or Activity (\$ in millions)	FY 12 Enacted	FY 14 Recmnd Level
Operations Research and Facilities		
<i>National Ocean Service</i>		
Regional Ocean Partnerships	3.5	10
Marine Debris	4.6	6
<i>National Marine Fisheries Service</i>		
Expand Annual Stock Assessments	63.5	75
Fisheries Statistics	23.1	24
<i>Office of Oceanic and Atmospheric Research</i>		
Integrated Ocean Acidification	6.2	11.6
<i>Program Support</i>		
Office of Marine and Aviation Operations	182.9	210

Ocean Conservancy has worked for nearly 40 years to address ocean threats through sound, practical policies that protect our ocean and improve our lives. We recognize that real leadership means real cooperation — between governments, businesses, scientists, policymakers, conservation organizations, and citizens. Our focus is on creating concrete solutions that lead to lasting change — so we can benefit from the ocean for generations to come.

We simply cannot afford the under-funding of NOAA's ocean and coastal programs. NOAA's mission in protecting, restoring and managing our oceans and coasts is vitally important not only to our oceans and coasts but also to our coastal and national economies. In 2010, according to the National Ocean Economics Program, coastal tourism and recreation contributed more than \$89 billion to the Gross Domestic Product and accounted for over 1.9 million jobs. Just last year, Superstorm Sandy showed how critical NOAA's coastal resilience programs are for protecting lives and property from damaging storms. Covering two-thirds of Earth's surface, the ocean is home to 97 percent of all life. Even the air we breathe is connected to a healthy ocean — more than half of the oxygen in the atmosphere is generated by ocean-dwelling organisms.

While we recognize these are tough fiscal times, and Congress is trimming government budgets across-the-board, NOAA's ocean programs have been particularly hard-hit with a roughly 14% reduction since 2010. On top of these cuts, the government-wide sequester currently in place reduces NOAA's budget by another 5%. With satellite procurement costs continuing to grow,

we urge Congress to maintain a balanced portfolio on investments across NOAA's missions. Americans shouldn't have to choose between forecasting the weather and protecting our ocean. We need both.

We recommend a total funding for NOAA that provides the resources needed to make smart choices for a healthy ocean that will not just benefit those who live and work along the coast, but the American economy and environment as a whole.

Within the recommended funding of the Operations, Research, and Facilities account, Ocean Conservancy would like to highlight the following as top priorities for robust funding:

Investments in Fisheries Science and Information

- **Expand Annual Stock Assessments, \$75 million:** Stock assessments provide critically needed resources for fisheries managers to assess priority fish stocks, implement the requirement for annual catch limits (ACLs), and ensure the successful recovery of overfished populations. The survey and monitoring and stock assessment activities funded under this line give fishery managers greater confidence that their ACLs will avoid overfishing while providing optimal fishing opportunities. Because the information provided by stock assessments is so vital to the implementation of ACLs and long-term goals for sustainable management of US fisheries, increased funding for stock assessments should remain among the highest priorities in FY 2014 and beyond. In 2012, NOAA turned the corner on ending overfishing and achieved a landmark for federal fisheries management in the U.S. through the implementation of ACLs for all federally managed fish stocks. In addition, better catch data contribute to more robust stock assessments, increasing the accuracy of fish population size estimates and allowing for better identification of catch targets and thresholds that prevent overfishing.
- **Fisheries Statistics: Marine Recreational Fisheries Monitoring, \$24 million:** Despite their often sizeable economic and biological impacts, much less data are collected from recreational saltwater fisheries than commercial fisheries due to the sheer number of participants and limited sampling of anglers' catches. The low level of data collection and lack of timely reporting of data in these fisheries is a large source of uncertainty and has become a flashpoint for controversy in regions where catch restrictions have been adopted to rebuild overfished stocks, particularly in the Southeast. By all accounts, improved sampling and timelier reporting of catch data are needed for successful management of marine recreational fisheries.
- **OMAO Operations and Maintenance \$210 million:** Base funding for NOAA's Office of Marine and Aviation Operations (OMAO) supports a fleet of 10 Fishery Research Vessels whose primary mission is to provide baseline information on fish populations that is critical to the development and regular updating of fishery stock assessments for the catch-setting process. More than 80% of stock assessments for species rely on this data. In recent years, however, rising operating costs (largely attributable to rising fuel costs) and budget constraints have sharply reduced the base-funded days at sea (DAS) for NOAA's fleet. The number of base-funded DAS for NOAA's fleet declined 40% between 2006 and 2011 forcing NMFS to spend its program funds to "buy back" days at sea not covered by OMAO in order

to maintain its regularly scheduled surveys and collect data that is needed to set appropriate catch limits. Without the independent surveys conducted by these vessels managers must increase the uncertainty when setting catch limits which can decrease fishing opportunities.

Regional Ocean Partnership Grants: 10 million

The Regional Ocean Partnership (ROP) Grants program provides competitively awarded funds to advance regional priorities for ocean and coastal management and science, ensuring that ocean management priorities are set at the state and regional level and determined by actual, on-the-ground needs. Regional approaches continue to be the most effective and efficient way to address ocean management challenges.

Nearly all coastal governors have voluntarily joined together to establish Regional Ocean Partnerships that connect state and federal agencies, tribes, local governments, and stakeholders to tackle ocean and coastal management issues of common concern, such as siting offshore energy, habitat restoration, coastal storm mitigation and reducing marine debris. While the priorities, structures, and methods of each partnership may differ to suit the needs of each region, they are collectively working towards an improved ocean environment and a stronger ocean and coastal economy. The grant program also helps Regional Ocean Partnerships leverage federal agencies' scientific research and data collection capacity by linking their activities with federal programs. Regional Ocean Partnerships are already producing on-the-ground results that benefit both the economy and the environment, including cutting edge scientific research, monitoring and practical tools like maps and surveys.

If these competitive grant funds are reduced or eliminated, states and their partnerships will be weakened – making them less able to assist local and regional ocean and coastal management needs and priorities, or leverage the federal government's support, expertise, and data collection capacity. For FY14, we request \$10 million, \$6.5 million above the FY12 enacted level of \$3.5 million.

Marine Debris: \$6 million

Marine debris has become one of the pervasive pollution problems facing the world's oceans, coasts and waterways. Research has demonstrated that persistent debris has serious effects on the marine environment, wildlife and the economy. Marine debris causes wildlife entanglement, ghost fishing, destruction of habitat, navigational hazards, vessel damage and pollutes coastal areas. The problem of marine debris has been growing over the past several decades and natural disasters such as the 2011 Japanese tsunami tragedy and Superstorm Sandy can exacerbate an already challenging issue. Trash travels and tsunami debris is impacting the West Coast now. Boats, a dock and various other forms of debris have washed onshore creating removal challenges and concerns over invasive species. On the East Coast, entire piers were washed into the ocean when Superstorm Sandy hit.

While the quantity of marine debris in our ocean has greatly increased, funding for NOAA's Marine Debris Program has remained well below the historically authorized level of \$10 million. Additional resources are needed to ensure NOAA has the capacity to monitor and respond to the impacts of debris from the tsunami, the Superstorm, and other sources. In order to

sustain current programs and allow NOAA the capacity to evaluate, track and clean up debris, for FY 14 we request \$6 million, \$1.5 million above FY 12 funding levels.

Integrated Ocean Acidification Program: \$11.6 million

In recent years, scientists have raised the alarm about ocean acidification – a process whereby ocean waters’ absorption of carbon dioxide emissions alters marine acidity. Over the last 250 years, oceans have absorbed 530 billion tons of carbon dioxide, triggering a 30 percent increase in ocean acidity. These changes can have far-reaching consequences for marine life, including economically important species like shellfish and corals. For example, the shellfish industry in the Pacific Northwest has been devastated in recent years as more acidic waters encroached upon important oyster hatcheries, nearly wiping out several years-worth of oyster “seed”.

Recognizing the dire need for better understanding of this emerging economic threat, in early 2009 Congress passed and enacted the Federal Ocean Acidification Research and Monitoring (FOARAM) Act. Under FOARAM, Congress instructed NOAA to establish an ocean acidification program to coordinate research, establish a monitoring program, develop adaptation strategies, and provide critical research grants to improve the understanding of ocean acidification’s ecological and socioeconomic impacts. Because economic impacts like those seen in the shellfish industry are on the leading edge of what will be a growing problem, adequate funding for this line item is critical to fulfill Congress’s directives and build the scientific foundation needed to protect vulnerable industries from ocean acidification.

We believe that the President’s FY 2012 request of \$11.6 million is reflective of the actual on-the-ground needs for Ocean Acidification. As stated in the President’s FY 2012 NOAA Congressional Budget Justification, funding at the \$11.6 million level will allow NOAA to develop more cost-efficient acidification sensors for monitoring; conduct an assessment of acidification effects on commercial and recreational marine fish stocks; and create a Coral Reef Ocean Acidification Observing Network. By increasing the programmatic funding for Integrated Ocean Acidification to this level, NOAA will be able to take these concrete actions to more effectively tackle the economic, on-the-ground implications of ocean acidification and prepare more effectively for future adaptation strategies that will protect our nation’s key ocean and coastal economic assets.

Thank you for the opportunity to provide this testimony. If you would like further information, please contact Emily Woglom at 202-351-0491 or ewoglom@oceanconservancy.org.

TESTIMONY OF

Randy Fisher, Executive Director, PSMFC

On Fiscal Year 2014 Budget
House Committee on Appropriations
Subcommittee on Commerce, Justice, Science and Related Agencies
March 21, 2013

The Pacific States Marine Fisheries Commission (PSMFC) hereby submits the following written testimony for the record on the Fiscal Year 2014 (FY14) Budget.

The three Interstate Marine Fisheries Commissions (PSMFC, ASMFC and GSMFC) and the twenty seven coastal states they collectively represent strongly support \$2.5 million in funding for the Inter Jurisdictional Fisheries Act (IJFA) in FY14 as well as \$32 million for the “Regional Councils and Fisheries Commissions” line items within the National Ocean and Atmospheric Administration’s (NOAA)/National Marine Fisheries Service (NMFS) budget in the Commerce, Science, Justice Appropriations Act for FY14.

IJFA Funding

The President’s Fiscal Year 2013 Budget Request proposed to terminate the IJFA Grants to States program, and it is currently unknown what will be included in the President’s FY14 Budget Request. The IJFA was established by Congress to promote and encourage state activities in support of the management of inter-jurisdictional fishery resources throughout their range. Funding under the IJFA supports the monitoring and assessment programs of the States and Interstate Commissions, as well as funding for research that gauge the health of commercially and recreationally important fish stocks. The IJFA is a matching grant program. Funds received by the States must be matched on a dollar-for-dollar basis. This is a classic example of an effective and affordable federal/state partnership for the management of near shore fisheries with inter-jurisdictional boundaries. The Administration used its discretion to allocate “unspecified reductions” within the 2012 NOAA Spend Plan to eliminate the IJFA grants for 2012. During consideration of the Commerce-Justice-Science appropriations for Fiscal Year 2013, as part of the Continuing Resolution, Congress restored the IJFA program to \$2 million. The three Interstate Marine Fisheries Commissions strongly support this action.

NOAA is currently going through a painful process of reducing its budget to conform to the Sequestration budget targets. **In an era of declining budgets, programs such as the IJFA that approach a dollar-for-dollar match should be fostered because they maximize the financial resources available for marine conservation and management. Authorizing and appropriating \$2.5 million annually for the IJFA results in an equal financial commitment from the States.**

“Regional Councils and Fisheries Commissions”

The President’s FY13 Budget also calls for \$27,349,000 for the “Regional Councils and Fisheries Commissions” NOAA line item in Fiscal Year 2013, a reduction of roughly \$4.5 million over the levels enacted in FY12. The Regional Councils are the workhorses of the Federal regulatory process for marine fisheries. Each Council is working to revise the fishery management plans under its jurisdiction to end overfishing and rebuild fish stocks. The ability of the Councils and Commissions to fulfill their statutory mandates will be severely hampered by the proposed cutbacks. As part of the Continuing Resolution, the Conferees have proposed an appropriation of \$31, 555,000 for the “Regional Councils and Fisheries Commissions” line item. The three Interstate Marine Fisheries Commissions strongly support this level of funding.

Commission Activities Supported by IJFA and “Councils and Commissions”

Pacific Region

IJFA funds are used by the PSMFC to coordinate the Tri-State Dungeness Crab Fishery. With a landings value in 2011 of over \$185 million, Dungeness Crab is the most valuable crab fishery in the U.S. It is managed on an inter-jurisdictional basis with funding from the IJFA. This was a federal fishery delegated to the States of Washington, Oregon, and California for management under the Magnuson-Stevens Act. If funding for this management regime ceases, NOAA will be forced to take the fishery back to the Pacific Fishery Management Council to develop a new fishery management plan.

PSMFC and the West Coast states also use their IJFA matching grants to engage in a wide range of other activities, including the conduct of rockfish surveys and tagging projects on the West Coast; management of the Pink Shrimp Fishery; management of the coastal pelagic species fisheries (Pacific Sardines, Pacific Mackerel, and Jack Mackerel account for 86,000 tons of commercial catch in California); research on the abundance and migratory patterns of steelhead on the Snake River; spawning and catch sampling of Pink, Chum, and Coho in Southeast Alaska; and conservation of coastal cutthroat trout (an ESA listed species); and technical support for the U.S.-Canada Groundfish Committee, which is tasked with inter-jurisdictional management cooperation for groundfish that border both nations.

The potential additional cuts in funding in the Councils/Commissions line item will reduce public participation in the North Pacific and Pacific Fishery Management Councils. Each Council currently meets five times per year. The proposed cuts would result in at least one of the meetings and possibly two being cancelled. The Councils will be required to reducing staffing by 25 percent. This will result in less public outreach and lower stakeholder input. With fewer meetings and less staff to analyze and present scientific information to Council Members, the Councils will be forced to err on the side of caution, resulting in smaller quotas and quicker fishery closures. This will result in lost jobs in the fishing and seafood processing industries, less sport fishing time, and a reduction in taxes to Federal, State, and Local Governments. The North Pacific Council will have to slow down its work in resolving halibut and salmon bycatch issues; the halibut catch sharing plan; and the implementation of new regulatory amendments to address safety issues in the factory longline fishing fleet. The Pacific Council will be hampered

in its ability to regulate the Sacramento River fall Chinook fishery, which is currently experiencing a rebound from the fishery disasters of 2008 and 2009.

Gulf Region

In the Gulf of Mexico, the IJFA is the cornerstone for the states' fishery management programs and has provided support for the five Gulf States' long-term databases for commercial and non-commercial crustaceans and finfish in the Gulf of Mexico. State and federal stock assessments are increasingly utilizing the fishery-independent databases and will be critical to future regional management success and provide the States' the ability to gauge the health of commercially and recreationally important fish stocks in their waters. As new stock assessment methodologies, such as ecosystem and food web approaches to fisheries management are explored and implemented, these state-derived fishery-independent data will be even more important. However, the ability to conduct stock assessments will hinge upon the quality and duration of these datasets which have been supported by the IJFA.

Under the IJFA language, the appropriations provided to the states to support their respective fisheries monitoring programs are determined by a formula based on a state's total marine fisheries landings. Based on the 2011 appropriations, the maximum allocation that any state could receive was approximately \$100,000 and the minimum was approximately \$8,000. The Gulf of Mexico had three 'maximum' states by volume and value. In the Gulf region, nearshore species such as Spanish mackerel, striped mullet, blue crab, and oyster comprise the majority of the commercial and recreational harvest, resulting in significant social and economic benefits to the states and the nation. In 2009, prior to BP's Deepwater Horizon disaster, 82% of the Gulf's total commercial fishery value was derived from state waters. Finally, the IJFA also allows Congress to provide assistance to the states in the event of a Fisheries Disaster under SEC. 113 in the form of funds and other economic assistance and does not require state match for financial relief such as the emergency disaster relief funding package following hurricanes Katrina and Rita in 2005.

The loss of IJFA funds in the Gulf region in 2011 and 2012 has resulted in drastically reduced support for the monitoring of our shrimp, crab, and finfish fisheries. The loss of IJFA has resulted in the elimination of other funding sources under the 1-for-1 match requirement, including contributions from limited state license revenues. Florida has lost three positions from their blue crab, shrimp, and horseshoe crab program which represents 40% of their crustacean research staff. Texas has reprioritized other funding to determine the status of their shellfish populations for formulating shellfish management and harvest regulations in coastal waters. Louisiana will be reprioritizing their sampling programs which may slow the development of appropriate management recommendations. Mississippi has been forced to reduce efforts in other state fishery programs to make up the difference to continue collecting long-term fishery-independent data. Alabama reports that the loss of IJFA funding has resulted in less efficient enforcement related to Alabama and Gulf of Mexico fisheries and the interactions of fishing activities among protected species.

In addition to the five States' fisheries monitoring, the IJFA also provides funding for the GSMFC to regionally coordinate inshore, state water fishery resources by the development of regional Fishery Management Plans (FMP). The FMPs are used by the states to enact

appropriate management strategies with conservation standards intended to maintain sustainable stocks into the future and provide coordinated support to get these management measures passed through their respective state commissions and/or legislative bodies. The GSMFC currently has 16 species under management plans or profiles with 10 additional species identified for future plan development. Future reauthorizations of the IJFA should be taken into consideration funding levels appropriate to the cost of fisheries management for today and beyond.

Atlantic Region

The fiscal resources available to ASMFC have been nearly static, and diminished in some areas, during the past decade. However, the demands of stakeholders, the necessary rigor of stock assessments, and the simple cost of administering and maintaining the transparency of the ASMFC process has increased. This contrast between funding and demands has required the ASMFC to prioritize activities at the expense of stock assessments and fishery management updates. This constraining of the ASMFC's budget is occurring at a time of unprecedented state budget cuts and threatens to limit the effectiveness of the ASMFC process and interstate management along the Atlantic coast.

The ASMFC process is extremely efficient and produces a high return on investment. With a budget of under \$10 million annually, the ASMFC manages 25 species that generate billions of dollars of economic activity from Maine through Florida. In fact, 35% of the total commercial landings value from Atlantic fisheries in 2011 was attributed to landings within 3 miles of shore. Over 90% of the Atlantic coast recreational catch is taken in state waters. This investment by Congress and the states in the ASMFC process likely represents one of the best return rates in all natural resource management. Continued investment in interjurisdictional management along the Atlantic coast will fund data collection and assessments to support better management decisions and restoration of stocks. Improved management will create more fishing opportunities and jobs and strengthen economic activity for Atlantic coastal communities.

The IJFA grants, though some may be small, have been successfully leveraged by the states to boost their survey, data collection, and monitoring abilities, including northern shrimp and American lobster sampling in New England; monitoring state quotas of black sea bass, summer flounder, and striped bass in the Mid-Atlantic; and surveying flounders, drum, shrimp and crabs in the South Atlantic. The program is a matching grant program, so the funds received by the states must be matched dollar to dollar.

The Atlantic Coastal Fisheries Cooperative Management Act (Atlantic Coastal Act) requires the Atlantic states to develop FMPs through the ASMFC and to implement and enforce those plans under state law, under penalty of pre-emption of a state's fishery by the Secretary of Commerce. The continued reduction in "Regional Councils and Commissions" funding would reduce the capacity of the ASMFC as well as its member states to develop, implement, and enforce FMPs. "Regional Councils and Fisheries Commissions" funding goes to help provide valuable sources of data that allow fisheries managers to achieve sustainability for commercial and recreational fisheries, generating billions of dollars of economic activity. Further budget cuts to the program would force the ASMFC to eliminate one of four ASMFC meetings, cancel stock assessment training for state scientists, delay (one year) benchmark stock assessments for American lobster, Atlantic striped bass, and northern shrimp, eliminate a stock assessment

scientist position, suspend outreach activities, and reduce FMP coordination capacity. The resultant impact would reduce the opportunity for public engagement in the management process; decrease the quantity, quality, and timeliness of scientific advice; and reduce the ASMFC's responsiveness to fisheries management issues. Greater scientific uncertainty would likely result in more precautionary management decisions, with consequent opportunity costs to commercial and recreational harvesters due to lower quotas and shorter seasons. Greater uncertainty also may decrease the justification for ASMFC actions, potentially resulting in legal vulnerability. Through the ASMFC process, states have reduced the number of overfished species by over 50% during the past decade; further progress towards rebuilding overfished species will be hampered by budget cuts and resulting lack of data and slowed response time.

Cutting Atlantic Coastal Act grants to the states would reduce the fisheries management and science activities needed to comply with the provisions of the Act. States use these funds to conduct nearshore fisheries surveys, assess stocks, monitor catches, and interact with stakeholders to implement and enforce the fisheries management measures approved by the ASMFC. For New England states, this would result in a loss of the ability to accurately track landings for quota management, prompting more precautionary management and potential triggering of accountability measures. Within the Mid-Atlantic region, lack of funding would lead to a direct loss of law enforcement presence. In addition, funding supports monitoring and management of important state and interstate fisheries, such as blue crab and horseshoe crab in Delaware, and red drum, Atlantic menhaden, and flounders in North Carolina. South Atlantic states use the funding to support both fishery monitoring and independent surveys, including Georgia's long-time trawl survey, which has been collecting data on shrimp, crabs, and finfish since the 1970s. In addition, funding supports data collection of bycatch, including protected species like sea turtles and Atlantic sturgeon, throughout the Mid- and South Atlantic.

On the federal side, there are three East Coast fishery management councils. The Administration's proposed 22% funding reduction (from FY12 to FY13) for the "Regional Councils and Fisheries Commissions" funding line item would reduce their capacity to engage stakeholders in development of FMPs and annual harvest levels. These cuts would reduce the number of meetings of each Council by at least one meeting per year; it would impact meetings of their Statistical and Science Committees and stakeholder advisory panels. These cuts would reduce scientific staff capacity to support crucial management questions and reduce FMP coordination capacity. The resultant impacts, similar to those for the ASMFC, would restrict opportunities for public involvement in the management process and decrease scientific advice available to managers, resulting in negative impacts on the Councils' ability to fulfill the requirements under the Magnuson-Stevens Fishery Conservation and Management Act. Further, the Councils' response to stakeholder input and their ability to make the necessary updates to NOAA's improved recreational data collection program and annual catch limits will be delayed or diminished.



Quinault Indian Nation

POST OFFICE BOX 189 □ TAOLOAH, WASHINGTON 98587 □ TELEPHONE (360) 276-8211

**Testimony Submitted by
Fawn Sharp, President, Quinault Indian Nation Testimony to the House
Subcommittee on Commerce, Justice, and Related Agencies
on the FY 2014 Budget for the Office of Justice Programs
Thursday, March 21, 2013**

\$1.3 Million Appropriations Request – Budget for Quinault Nation Narcotics Enforcement Team (QNNET) Annual Staffing and Operations

- 1. Staffing (two field agents, two administrative agents, one administrative assistant):
\$670,000**
- 2. Operating expenditures: \$630,000**

Honorable Chairman Wolf and members of the Appropriations Subcommittee, I submit the following comments on behalf of the people of the Quinault Indian Nation, a sovereign Treaty Indian Tribe located on the Pacific Ocean in the State of Washington. The Quinault Indian Reservation is a land of beautiful forests, rivers, and lakes and 23 miles of unspoiled Pacific coastline. Our people have flourished in this region for thousands of years, sustained by the magnificent natural resources provided by our Creator. Our culture remains enriched by the principles of our heritage and we are committed to high standards of stewardship and the objectives of sustainable prosperity.

However, there are challenges forced upon us in some measure by the excesses of contemporary non-tribal society, which threatens our existence, as we know it. My testimony shall, in particular, address the drug and weapons trafficking on and through our Reservation.

The commitment level of the Quinault tribal government to eliminating illegal drugs and guns as well as smuggling, from our lands is absolute. Our tolerance level is zero and our tribal police and social service agencies work daily, on a cooperative basis with local, State and Federal agencies and community members to deal with these problems. Yet we are facing escalating threats of drug trafficking, narcotic distribution, related gang activity and weapons offenses, leading to devastating social, health, and environmental consequences. The social fabric of these criminal communities has changed. Elder abuse has expanded as a result of drug trafficking. Our young people are increasingly affected. More than 30 percent of all drug and alcohol arrests are juveniles.

Testimony Submitted by President Fawn Sharp, Quinault Indian Nation
House Subcommittee on Commerce, Justice, Science and Related Agencies
Re: Quinault Nation Narcotics Enforcement Team FY 2014 Budget Request

There is an unfortunate belief among smugglers that our open-ocean borders provide easy access for their free movement. We are committed to quashing that belief. We are working day and night, year around, to effect the strongest possible enforcement. We will not allow our lands to be an open door to the flow of poisons into our society. Our objective is to let the message be spread far and wide to those who would harm our people, "Don't mess with Quinault!" That message will be conveyed, in force, to those who dare to produce or distribute illegal narcotics or guns on our lands. Far too much is at stake for us to take any other position.

We ask for your support in this endeavor.

The Quinault Business Committee, our tribal legislative body, voted to combat these problems by forming the Quinault Nation Narcotics Enforcement Team (QNNET) in 2011. This agency continues to prevent and suppress narcotic trafficking and drug use through intensive investigations and collaboration efforts.

The QNNET apprehension record includes more than 60 drug related arrests that led to successful prosecution by the appropriate agency. Seizures included cocaine, marijuana, heroin, prescription drugs, and methamphetamines. In early 2004, QIN's Tribal Code did not differentiate the punitive measures for those possessing marijuana from those possessing heroin or methamphetamine. At the present time, the legal codes are now rewritten and strengthened.

QNNET has, against all odds, established itself as one of the top Tribal Narcotics units in the Northwest. QNNET, in cooperation with the U.S. Drug Enforcement Agency and State and local drug units have identified Mexican Drug Cartel members on the Quinault Nation Reservation and we have been working to rid ourselves of them. Last year, QNNET along with other agencies arrested members of a Mexican drug ring and seized more than three pounds of Heroin. QNNET assisted in the seizure of more than 19 pounds of Meth just outside the boundaries of the Reservation and provided information that led to the seizure of more than 255 pounds of Meth from a Mexican drug house in Modesto, California.

QNNET continues to receive information regarding planes able to land on our beaches, alongside boats that have been observed by tribal members, which appeared to be used in off loading of drugs. The Quinault Nation has 26 miles of beaches that are not able to be patrolled due to a lack of staffing. That is a situation that must change. QNNET is also active in interdiction on the US 101 Highway, considered by many to be an alternate route to the Canadian border.

QNNET devotes time to addressing local drug issues with the Tribal Villages and providing education in our schools. QNNET has been very successful in removing drug dealers from the streets and to an increasing degree getting drug users into treatment.

Testimony Submitted by President Fawn Sharp, Quinault Indian Nation
House Subcommittee on Commerce, Justice, Science and Related Agencies
Re: Quinault Nation Narcotics Enforcement Team FY 2014 Budget Request

QNNET is in need of additional resources and training to address all of these issues. The potential for extreme violence is always present when dealing with Mexican Cartel members and others who choose to use the Quinault Indian Nation as a distribution center for narcotics.

The regional topography renders the reservation susceptible to drug smuggling and production. The Washington section of the United States – Canadian border is approximately 430 miles in length, a significant portion of which is vast, dense forest. This includes more than 55 miles of rural highways, 18 miles of open coastline, and a border that has 13 official ports of entry, leaving the rest of the border largely unpatrolled.

Let there be no mistake. The Quinault Nation is at war with illegal drug smugglers, and we need the help of the United States government to solve these problems and win this war.

We continue to work toward resolution of various specific challenges, including: The updating of GPS and coordinate radio capabilities to field agents; provision of adequate broadband access, particularly in remote areas and the heavily forested lands; closed circuit surveillance of forest roads, public highways, and clandestine ports used by narcotic traffickers; interdepartmental cross-training for law enforcement officers; increasing case selection for prosecution; establishing strong cultural programs and traditional practices as a part of prevention standards and post arrest care for offenders with mental health or chemical dependency issues for implementation by direct services providers; balancing community trust with operational confidentiality; building sustainable, diverse revenue sources; promoting interagency trust and open communication with Federal, military, and law enforcement agencies; developing community rapport without jeopardizing identity or confidentiality; and gaining access to incarceration and interrogation facilities.

Conclusion

In supporting our program, you are supporting the health and well-being of tribal citizens as well as the Federal Trust Responsibility to our Tribe. I am very pleased to report to you that there is another very good reason to support the appropriations requests related to our drug, alcohol and weapons program—it's working!

Since October 2010, our officers have expanded positive working relationships with Federal, state and local agencies. Together, we were able to bust a cartel-supported drug ring on the Reservation. We have seized more than 128 kilograms of drugs, more than \$2.7 million in cash, drugs, etc., conducted 123 investigations that led to arrests, added a very valuable K-9 dog and handler to our force, and we have seen a drop in personal property crimes as a result of these and other measures.

However, the influx of Cartel Members within the northern area of our Reservation continues to be a direct threat to the safety and welfare of our tribal members and employees, as

Testimony Submitted by President Fawn Sharp, Quinault Indian Nation
House Subcommittee on Commerce, Justice, Science and Related Agencies
Re: Quinault Nation Narcotics Enforcement Team FY 2014 Budget Request

well as others. This past year a tribal member was hunting in the northern area forest when she observed a body near a logging road. As QNNET arrived on the scene, the body had been removed and subsequent QNNET investigations did indicate that the dead body was the result of a drug related incident.

As I have pointed out, the Quinault Nation has 26 miles of unprotected shoreline. Due to a lack of staffing and resources, QNNET is unable to actively patrol these areas of concern. A more proactive approach is an absolute necessity to address this issue.

There is an urgent need for QNNET to remain funded. Additional staffing is needed to not only become more proactive in our approach to drug investigation but also for officer safety concerns. Without funding and additional staffing, it will be a challenge to stop the flow of drugs into Indian country and to protect the quality of life that each tribal member is entitled to and deserves.

The Quinault Indian Nation is committed to continuing efforts to reduce the sale, use, and distribution of illegal drugs by investigating, arresting, and prosecuting offenders. With ongoing financial support from key partners, QIN will continue to leverage resources, and continue embracing positive activities and our culture to deter first use among tribal youth. We will continue to link offenders with culturally competent substance abuse treatment. We will also continue to build collaborative relationships with Federal, state, and local agencies to deploy joint counter drug operations leading to the arrest and successful prosecution of narcotic traffickers operating on or near the QIN Reservation.

It is an honor to present this testimony to the House Committee on Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies. The issues presented to you herein are of utmost concern to us. We are determined to deal with them professionally and effectively and, with your continued support, we will make substantial progress on the objectives presented in a manner, which will positively affect the lives of our children, our elders, and all members of our nation.

Thank you for your consideration and for your efforts to stand up for the rights and needs of our people, and for the implementation of the Federal Trust Responsibility to the Quinault Indian Nation.



**OFFICIAL TESTIMONY OF
JEFFREY R. BENOIT
PRESIDENT AND CEO, RESTORE AMERICA'S ESTUARIES**

**FISCAL YEAR 2014 APPROPRIATIONS
HOUSE COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON COMMERCE, JUSTICE,
SCIENCE, AND RELATED AGENCIES**

March 21, 2013

Restore America's Estuaries is a nonpartisan, nonprofit organization that has been working since 1995 to restore our nation's greatest estuaries. Our mission is to preserve the nation's network of estuaries by protecting and restoring the lands and waters essential to the richness and diversity of coastal life. Restore America's Estuaries is a national alliance of community-based coastal conservation organizations across the nation that protect and restore coastal and estuarine habitat. Our member organizations include: American Littoral Society, Chesapeake Bay Foundation, Coalition to Restore Coastal Louisiana, Save the Sound—a program of the Connecticut Fund for the Environment, Conservation Law Foundation, Galveston Bay Foundation, North Carolina Coastal Federation, EarthCorps, Save The Bay—San Francisco, Save the Bay—Narragansett Bay, and Tampa Bay Watch. Collectively, we have over 250,000 members nationwide.

For fiscal year 2014, Restore America's Estuaries supports the following funding levels within the Department of Commerce, National Oceanic and Atmospheric Administration (NOAA):

- | | |
|---|--|
| <ul style="list-style-type: none"> • Fisheries Habitat Restoration: Community-based Restoration Program • Estuary Restoration Program | <p>\$28 million</p> <p>\$1.5 million</p> |
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Restore America's Estuaries

March 21, 2013

NOAA, FISHERIES HABITAT RESTORATION: COMMUNITY-BASED RESTORATION PROGRAM

NOAA's Fisheries Habitat Restoration, largely comprised of the Community-based Restoration Program (CBRP), **accomplishes on-the-ground projects** to restore the nation's coastal, marine, and migratory fish habitat. The program provides technical expertise – including engineering, construction, and monitoring – as well as funding to regional and national partners, and directly to local communities to carry out projects such as marsh and wetlands restoration, small dam removals, and hydrologic re-connections of tidal systems, all of which protect a variety of threatened and/or endangered species, provide healthy outdoor recreational opportunities, and help buffer coastal communities from the threat of erosion and coastal storms. Federal investments in restoration provide long-lasting benefits to local communities and economies.

NOAA's Community-based Restoration Program provides funding through competitively-awarded partnerships. We believe the partnership model is critical piece of the program's success because it helps to ensure that restoration projects meet **community-driven priorities** and engage local citizens in the restoration activity. The community-engagement aspect of the program is critical to long-term restoration efforts because restoration projects occur over time and require long-term community support. To date, the program has been highly successful at improving the health of coastal habitats across the nation, benefiting both the environment and the economy through partnerships. By working collaboratively with more than 1,500 organizations, CBRP has funded more than 2,300 small- to mid-scale on-the-ground projects to restore over 97,000 acres of habitat. This work has involved more than 290,000 volunteers in projects, contributing more than 1 million volunteer hours.

CBRP funding accounts for only a very small portion of the total NOAA federal budget but provides dramatic results in coastal communities. The funding for this program is also very cost-effective, as the federal investment is matched by local organizations and are used to leverage significantly more private and local investment in our nation's coasts. Depending on the project, federal funds are leveraged between 3 and 5 times with private, local, and state funds. Maintaining funding for CBRP partnerships that accomplish locally driven restoration and engage communities and citizens is well worth the investment.

The CBRP not only helps to improve the nation's degraded habitats but also helps create jobs and benefit local economies. NOAA data shows that restoration projects create between 17-33 jobs per \$1 million invested.¹ And unlike other sectors, these restoration jobs can't be outsourced and will remain in communities. First there are the immediate local jobs, followed by the significant long-term ecologic and economic benefits. Habitat restoration is

¹ Table 1: <http://www.habitat.noaa.gov/about/habitat/habitatconservationjobs.html> (Accessed March 2013); http://www.habitat.noaa.gov/pdf/RAE_Restoration_Jobs.pdf.

critical to sustaining and rebuilding the fish populations needed to support sport fishing opportunities and the commercial fishing industry in the coming years. The resulting healthier habitats strengthen and revitalize America's communities by buffering against storms, preventing erosion, protecting vital infrastructure, eliminating public safety hazards, and providing new recreational opportunities.

Restore America's Estuaries urges your continued support and funding for NOAA's Community-based Restoration Program. **We urge the committee support our request of \$28,000,000 for the Fisheries Habitat Budget line and request the committee include the following directive language:**

The restoration of coastal and estuarine habitats is of national importance and essential to the core mission of NOAA to achieve sustainable fisheries and resilient coasts. Within the funds provided, no less than \$17,000,000 shall be available for external funding for partnerships that support local fisheries habitat and shoreline resiliency needs through the Community-based Restoration Program.

NOAA, ESTUARY RESTORATION PROGRAM

Authorized through the Water Resources Development Act of 2000 and reauthorized by Congress in 2007, the Estuary Restoration Act (ERA) established a comprehensive interagency program for the restoration of the nation's estuaries. The ERA's Estuary Habitat Restoration Council, comprised of the five primary federal restoration agencies (USACE, NOAA, EPA, USFWS, and USDA - NRCS) is leading a coordinated approach to maximize benefits from restoration and address the pressures facing our nation's estuaries. With declining federal resources, this level of coordination has never been more important. As current Council Chair, NOAA is leading efforts through the Estuary Restoration Program, while also maintaining an interagency ERA project database that serves as a useful and cost-effective clearinghouse for all agency restoration information. Maintaining funding for this important program is important for continued progress.

In November 2012, the Estuary Habitat Restoration Council approved the 2012 Estuary Habitat Restoration (EHR) Strategy and five-year action plan. The action plan identifies outcomes and milestones to ensure that restoration efforts are coordinated, evaluated, and tracked across agencies with the goal of ensuring efforts are effective and efficient. Maintaining funding for this important program is important for continued progress.

Restore America's Estuaries urges your continued support of the Estuary Restoration Council and NOAA's **Estuary Restoration Program** and ask that you provide \$1,500,000 in funding for Fiscal Year 2014.

CONCLUSION

Restore America's Estuaries greatly appreciates the support this Subcommittee has provided in the past for these important programs. These programs help to accomplish on-the-ground restoration work which results in major benefits:

- **Jobs** – Coastal habitat restoration projects create between 17-33 jobs per \$1 million invested. That's more than twice as many jobs as the oil and gas sector and road construction industries combined.
- **More fish** – Traditional fisheries management tools alone are inadequate. Fish need healthy and abundant habitat for sustainable commercial and recreational fisheries.
- **Resiliency** – Restoring coastal wetlands can help knock down storm waves and reduce devastating storm surges before they reach the people and property along the shore.
- **Leverage** – Community-based restoration projects leverage 3-5 times the federal investment through private matching funds, amplifying the federal investment and impact.

Thank you, Mr. Chairman and we appreciate your taking our requests into consideration as you move forward in the FY2014 appropriations process. We stand ready to work with you and your staff to ensure the health of our Nation's estuaries and coasts.

**STATEMENT OF
DIANE WILLIAMS
PRESIDENT
SAFER FOUNDATION
571 W. JACKSON BLVD
CHICAGO, IL 60661**

**SUBMITTED TO
THE HOUSE COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE**

FISCAL YEAR 2014

Chairman Wolf and Ranking Member Fattah, thank you for the opportunity to submit testimony on behalf of the Safer Foundation and in support of Fiscal Year 2014 appropriations for Second Chance Act programs. Based in Chicago, Illinois, Safer Foundation is a leading nonprofit provider of reentry and employment services for individuals with criminal records. We offer a myriad of services including job-readiness and training programs, job-placement, secondary and continuing education opportunities, and referrals to behavioral health services - as appropriate. Through this continuum of services, Safer provides a cost-effective pathway for ex-offenders to escape the cycle of crime and incarceration by transitioning to employment and becoming a productive member of society. Federal programs, such as the Second Chance Act (SCA), help state and local justice systems explore, implement and scale-up best practices for reentry programs. **In Fiscal Year 2014, Safer Foundation respectfully recommends the Subcommittee fund SCA at \$80 million.**

The United States has the highest rate of incarceration in the developed world. One in every 100 adult U.S. citizens is incarcerated. One-third of black males under the age of 24 are incarcerated. In Illinois, the rate of recidivism without access to reentry services is 62%. Clearly, cyclic incarceration has become an epidemic in our country with outlandish direct and indirect costs to society. Behind Medicare/Medicaid, most states' next highest outlay is the justice system. Illinois spends \$1.3 billion each year maintaining its 48 prisons and jails and housing over 48,000 prisoners. It costs approximately \$38,000 a year to incarcerate an individual in Illinois. With a recidivism rate of 51%, Illinois is spending extravagant amounts of taxpayer money to arrest, prosecute, and re-incarcerate the same individuals again and again.

A significant portion of these direct costs can be prevented through the integration of efficient and well-funded reentry services. It costs \$3,200 to provide a full year of services to a client at Safer Foundation, in comparison to \$38,000 for a year of incarceration. However, these sorts of system changes require investment and innovation. Many states, including Illinois, are in the midst of a severe and prolonged budget crisis and cannot afford the upfront costs to invest in reentry services. Federal programs such as the Second Chance Act jump start state and local reentry programs, providing replicable models and best-practices which can be applied to other municipalities and jurisdictions. Federal money is seed money, which if invested wisely in evidence-based programs, yields a reduced burden on local, state, and federal justice system outlays.

In addition to the clearly defined direct cost to public resources, high rates of incarceration and recidivism have higher but less quantifiable indirect costs to society and communities. Individuals who are incarcerated are unemployed and pay no taxes. Many who are incarcerated receive no job-training or educational opportunities and therefore gain no marketable skills while in jail or prison. Furthermore, many employers are reluctant to hire a person with a criminal record, even if their crime was unrelated to the field of employment or occurred many years ago. Without sufficient reentry services the prospects for an individual with a criminal record finding legitimate and sustainable employment upon release are few and far between.

If the incarcerated individual is a parent, their imprisonment has profound and severe effects on their spouse and children. Numerous studies have documented the negative impacts of an absentee father on the life of a child. The U.S. has an enormous population of children growing

up in single-parent homes. If a father continuously rotates through the criminal justice system because he lacks the skills, resources or opportunities to escape the cycle of incarceration, his absence places his children at additional risk of delinquency and dropping out of school. Second Chance Act programs support organizations such as Safer Foundation that provide comprehensive case management in order to place individuals in sustainable, living-wage employment while reconnecting the family through wraparound services.

Reentry programming is a cost-effective alternative to incarceration that reduces crime and increases public safety. Safer clients are 62% less likely than their peers to recidivate. Not all individuals have the same level of preparation for work and so Safer offers the full scope of reentry, job-readiness and job-placement services - Safer's case management reflects the needs of each individual. Safer's model is two-fold: case managers interact solely with the client, conducting intake, assessing their needs, connecting with the appropriate wraparound services and enrolling the client in necessary education or job-training programs. Employer Liaisons interact directly with local employers throughout the greater Chicago area, match employer needs with client skills and often serve as an external human resources for local employers.

Each year over 10,000 individuals seek Safer's services. Of those 10,000 persons, 1,200 receive educational services, 1,250 receive job-readiness training, and 4,200 are successfully placed in living-wage employment. Of those individuals placed in employment, 95% maintain employment through three-months, 83% over six-months, and 76% retain employment for a full year.

Integral to Safer's transition continuum are the two minimum-security, male residential transition centers we administer for the Illinois Department of Corrections (IDOC). At these two Adult Transition Centers (ATCs), Safer provides 24-hour housing, treatment, education, and job readiness/placement and retention services for approximately 1,200 incarcerated men each year. We are able to help those men gradually reenter their communities, while achieving benchmarks around educational advancement and job attainment. Both ATCs are located in North Lawndale on the near west side of Chicago - this is a community greatly impacted by the corrections system, with 70% of its male residents having a criminal record.

Safer also designed its own approach to basic skills and GED completion years ago - the Youth Empowerment Program. Through this eight-week model, youth who have criminal records are both students and teachers. Safer shaped the model to accept participants at any grade level and the results have been consistently strong. In 2012, over 287 individuals attained their GEDs and increased their literacy proficiency by an average of two grade levels.

The critical funding authorized by the Second Chance Act and appropriated by this Subcommittee provides assistance to states, local governments and community-based organizations concerned with prisoner reentry. It enables the field to begin to address some of the systemic barriers to breaking the cycle of incarceration - barriers such as employment, housing and substance abuse. On behalf of our clients, the Safer Foundation sincerely thanks the Subcommittee for its past leadership and trusts Congress will provide the most robust funding level possible for Fiscal Year 2014. Recognizing the current fiscal environment, we remind you

and your colleagues of the average cost of a year of incarceration. The cost of reentry is far offset by the savings achieved as a result of recidivism reduction.

As well, Safer is grateful for this Subcommittee's interest in the "Justice Reinvestment" process – which takes a data-driven approach to reducing recidivism and corrections spending without compromising public safety. I would ask that you remind your colleagues that as budget crunches force tough decisions it is imperative that we not create short-term reductions that generate long-term disasters. Alternatives to incarceration can be more effective and less costly. Let's not incarcerate more people than we have to.

**Terry Gibson, Chairman of the Shoshone-Paiute Tribes of the Duck Valley Reservation
Testimony to the House Subcommittee on Commerce, Justice, Science,
and Related Agencies
Fiscal Year 2014
March 21, 2013**

Mr. Chairman and members of the Subcommittee, on behalf of the Shoshone-Paiute Tribes of the Duck Valley Reservation, I am pleased to submit testimony concerning the FY 2014 Budget for the Department of Justice and the Office of Justice Programs (OJS), Community Oriented Policy Services (COPS), and Office on Violence Against Women Act (OVW) Programs.

The Duck Valley Reservation straddles the Idaho-Nevada border along the east fork of the Owyhee River. The Reservation encompasses 290,000 acres (450 square miles) in Elko County, Nevada and Owyhee County, Idaho. Over 1,700 tribal members, of a total enrollment of 2,030, reside on the Reservation. Tribal members make their living as farmers and ranchers, but many are employed by the Tribes. Since the mid-1990's, we have contracted the duties of United States under Self-Governance compacts that we negotiated with the Bureau of Indian Affairs (BIA) and Indian Health Service (IHS), transportation services we contract from the Federal Highway Administration (FHWA), and housing services we perform with HUD funds. We owe it to our members to provide them with a safe community with adequate programs, services and facilities to meet their needs.

The United States has a continuing trust responsibility to Indian tribes that have arisen from treaties, statutes, executive orders, Federal court decisions and course of dealings, to protect and strengthen tribal governments and to protect Indian people. Contrary to what some may think, the obligations of the United States to the Nation's federally recognized Indian tribes are not discretionary acts by the United States; to the contrary the obligations represent the Federal government's fulfillment of its mandatory obligations to Indian tribes arising from the special trust responsibility between our governments.

I am pleased to learn that the House and Senate have passed a continuing appropriation for FY 2013 that provides funding through the end of the current fiscal year. I am sorry to learn, however, that indiscriminate cuts of five percent must be absorbed by federal agencies over the remaining six months of this fiscal year due to sequestration. This will make our job of building essential criminal justice programs on the Reservation more difficult. I encourage the Subcommittee to prioritize Justice Department funding in the FY 2014 appropriations bill to help tribal governments address staffing needs for law enforcement, court officials, and substance abuse counselors as well as increasing funding so that we may build our reservation infrastructure.

Unless the Continuing Resolution protects Justice-funded programs for the remainder of FY 2013, some \$1.0 billion in cuts will be made to Justice Department programs for the remaining six months of FY2013, including a reduction of \$133 million to Office of Justice Programs (OJP) that are important to Indian tribes such as the Edward Byrne Memorial grants (-\$56 mil.), COPS grants (-\$8 mil.), Violence Against Women Prevention and Prosecution

Programs (-\$20 mil.), and Juvenile Justice Programs (-\$13 mil.). In many instances, Federal grants help Indian tribes leverage other resources. I hope that Congress will resolve the budget debate so that the Nation can focus its energies and resources to create jobs, build our economies, and make our communities safer.

Far too often, federal programs and grants for Indian tribes are underfunded based on our proven needs, growing population, and limited resources and remote locations which deprive us of cooperation and assistance from other jurisdictions. Cuts to already under-funded Federal programs serving Indian country diminishes our capacity to create the environment to promote economic development and build our communities infrastructure to serve our members and other residents today, and for years to come.

Due to black mold infestation in our existing headquarters, we must replace it with new construction. We have prepared plans for a six-phase Tribal headquarters complex, including a 9,600 square foot Tribal Court facility to house our courtroom, tribal judges, clerks, prosecutors, probation officers, plaintiff and defendant meeting rooms, jury and conference room, administrative offices, library holding area and public space. We will require federal assistance to help us finance the \$2.2 million required to build the Tribal court facility.

Congress must recognize that our infrastructure and capacity is not as well developed as other localities and jurisdictions. Deferring infrastructure and cutting program resources makes the job of tribal governments more difficult and ultimately more costly if programs and services and infrastructure are delayed to future years. Our members need these programs now.

Ensuring public safety and maintaining an effective criminal justice system on our Reservation is of the utmost importance to the Tribes. We look forward to working with the 113th Congress and the Administration on the FY 2014 Budget with respect to the programs important to Indian country. We recognize that the President's FY 2014 Budget has not yet been released; however, we are optimistic that Congress and the Administration will work together to meet the United States' trust responsibilities to Indian tribes and to the Indian people. Public safety is a basic governmental function, yet all too often, crime rates in Indian country are well above the national average. We have too few officers to patrol vast land areas and we lack the resources to treat underlying behavioral issues that cause many people to commit criminal and violent acts.

By empowering local governments, including Indian tribes, to provide for a full spectrum of treatment services, to carry out law enforcement services with properly staffed and well trained police officers, to adjudicate criminal matters in Tribal courts, staffed by qualified and trained officials, where defendants are represented by competent counsel to ensure that their rights are protected, and where convicted offenders can be sentenced and serve their terms in modern, safe detention facilities located on the reservation, the United States is fulfilling an important trust responsibility owed to Indian nations. Public safety, courts of law, modern, well designed treatment and detention facilities are the foundation for good government and the springboard to economic development and job creation in Indian country.

The Tribes have been working closely with the Justice Department and the BIA to renovate an 18-bed, secure juvenile detention facility located close to our government offices, so that we may treat and retain incarcerated young offenders on the Reservation where they can receive culturally appropriate treatment and counseling. This spring we will conclude the renovation of the facility. Were it not for Justice Department construction grants we received under the OJP, Correctional Facilities in American Indian and Alaska Native Communities Discretionary Grant Program, we could not have built this facility or financed the renovation work.

Office of Justice Programs – The Tribes support program increases to the OJP budget. Without considering sequestration, the FY 2013 appropriation increases State and local law enforcement grants from \$962 million to \$1.14 billion. We encourage the Subcommittee to provide increased funding for Indian tribes in FY 2014 and to support the Administration's request to include a 7% tribal set aside in FY 2014 bill language. Within the FY 2013 increase is \$392.4 million for the Edward Byrne Memorial Justice Assistance Grant Program, \$38 million for assistance to Indian tribes, and \$68.7 million for offender reentry programs and research, to improve state, local and tribal probation supervision efforts and strategies under the Second Chance Act of 2007. We urge the Subcommittee to offset sequestration's harmful cuts to OJP programs in FY 2014.

We appreciate the work of this Subcommittee and the OJPs to streamline the delivery of Department grants to Indian tribes under the Coordinated Tribal Assistance Solicitation (CTAS) grants management system. Under the CTAS, we can apply for grants in nine purpose areas.

This year, under the Tribal Law and Order Act (TLOA), the Shoshone-Paiute Tribes were selected as one of three tribes in the country to participate in a pilot program initiated by the Justice Department, BIA, IHS and the Substance Abuse and Mental Health Services Administration (SAMHSA) to develop and implement holistic services for incarcerated individuals on the Duck Valley Reservation. We are excited to implement the pilot program, especially as it relates to our juvenile detention services to ensure that any tribal youth who must be incarcerated receive integrated substance abuse counseling, mental health counseling, education, and health care services in a secure setting. The concept of the pilot program is to bring disciplines from the Tribes, Justice, BIA, IHS and SAMHSA together to identify tribal priorities and jointly plan best practices to address substance abuse and criminal activities on the Reservation.

Toward that end, OJP's grants under the Justice Systems and Alcohol and Substance Abuse (BJA), Corrections and Correctional Alternatives (BJA), Juvenile Justice (OJJDP), and Tribal Youth Program (OJJDP) grants will prove critical to our success. We are the recipient of a number of 2010 and 2011 BJA CTAS grants to combat alcohol and substance abuse on the Duck Valley Reservation, to enhance our Tribal court and to address violence against women.

COPS – We are pleased to see an increase in FY 2013 funding for the COPS program (to \$222.5 million). The FY 2013 budget includes \$20 million for improving tribal law enforcement, including funds for hiring, equipment, training, and anti-methamphetamine activities. Indian country needs more than twice this amount to hire officers and provide

equipment to patrol our lands and roads to fight methamphetamine distribution and drug trafficking that traverses the Duck Valley Reservation and other remote, mostly rural reservations.

Under the Omnibus Public Land Management Act of 2009, we carry out the Owyhee Initiative, to safeguard and protect tribal culture and burial grounds on public lands administered by the Bureau of Land Management (BLM). We receive modest funding under that Act to carry out our obligations, which includes patrolling public lands in Owyhee County. The President's FY 2013 budget had requested \$286 million for the COPS program. We urge the Subcommittee to increase FY 2014 funding for the COPS program to help tribal governments address the documented need for increased law enforcement officers, investigators, dispatchers and support personnel similar to staffing levels in other jurisdictions.

OVAW – We commend Congress for passing the Violence Against Women Reauthorization Act of 2013 (S. 47). This legislation plugs a terrible loophole that permitted individuals to escape prosecution and incarceration because their victims were Native American and the domestic abuse took place in Indian country. I urge the Subcommittee to appropriate funding in FY 2014 to fully implement VAWA's programs to fight violence against Native American women, especially programs to help Indian tribes qualify as "participating" tribes under P.L. 113-4, so that tribes may exercise the special domestic abuse criminal jurisdiction that is conferred by the recent VAWA Reauthorization Act to prosecute domestic violence crimes.

Within the CR for FY 2013, Congress provided \$416.5 million for grants, contracts, and other assistance for the prevention and prosecution of violence against woman, including \$25 million for transitional housing assistance grants for victims, \$25 million for sexual assault victims, \$36.5 million for rural domestic violence assistance grants. We appreciate the \$1.0 million for an analysis concerning violence against women and \$500,000 for the Office of Violence Against Women to establish a clearinghouse to provide training and technical assistance relating to sexual assault of American Indian women.

We encourage the Subcommittee to build on this funding in FY 2014 and as authorized under P.L. 113-4, to ensure that there are adequate funds for violence against Native women and the programs created under P.L. 113-4 are fully implemented in FY 2014 and future years.

If Indian reservations are to be made safer, tribal governments require the resources, personnel, facilities and training to provide essential services to our members, reservation residents, and the visitors we hope to attract.

Thank you for permitting me the opportunity to present testimony concerning the FY 2014 CJS budget.



SOCIETY for INDUSTRIAL and APPLIED MATHEMATICS

3600 Market Street, 6th Floor
Philadelphia, PA 19104-2688 USA
Phone +1-215-382-9800
Fax +1-215-386-7999
www.siam.org · siam@siam.org

**Outside Witness Testimony from:
Society for Industrial and Applied Mathematics (SIAM)**

**Submitted by: Dr. Irene Fonseca
President, Society for Industrial and Applied Mathematics (SIAM)
&
Dr. David Levermore, Vice President for Science Policy, SIAM**

**Submitted to the Subcommittee on Commerce, Justice and Science
Committee on Appropriations,
United States House of Representatives
Washington, DC**

**Testimony on the Fiscal Year 2014 Appropriations
for the National Science Foundation**

March 20, 2013

Summary: This written testimony is submitted on behalf of the Society for Industrial and Applied Mathematics (SIAM) to ask you to continue your support of the National Science Foundation (NSF) in fiscal year (FY) 2014 by providing NSF with the highest possible funding level. In particular, we urge you to provide strong support for key applied mathematics and computational science programs in the Division of Mathematical Sciences and the Division of Advanced Cyberinfrastructure.

Full Statement:

We are submitting this written testimony for the record to the Subcommittee on Commerce, Justice, Science, and Related Agencies of the Committee on Appropriations of the U.S. House of Representatives on behalf of the Society for Industrial and Applied Mathematics (SIAM).

SIAM has approximately 14,000 members, including applied and computational mathematicians, computer scientists, numerical analysts, engineers, statisticians, and mathematics educators. They work in industrial and service organizations, universities, colleges, and government agencies and laboratories all over the world. In addition, SIAM has almost 500 institutional members, including colleges, universities, corporations, and research organizations.

Testimony for the House Appropriations Committee – Commerce, Justice, Science Subcommittee (3/20/2013)–Page 1



SOCIETY for INDUSTRIAL and APPLIED MATHEMATICS

3600 Market Street, 6th Floor
Philadelphia, PA 19104-2688 USA
Phone +1-215-382-9800
Fax +1-215-386-7999
www.siam.org · siam@siam.org

First, we would like to emphasize how much SIAM appreciates your Committee's continued leadership on and recognition of the critical role of the National Science Foundation (NSF) and its support for mathematics, science, and engineering in enabling a strong U.S. economy, workforce, and society.

Today, we submit this testimony to ask you to continue your support of NSF in FY 2014 and beyond. In particular, we request that you provide NSF with the highest possible funding level.

As we are reminded every day, the nation's economic strength, national security, and public health and welfare are being challenged in profound and unprecedented ways. Addressing these challenges requires that we confront fundamental scientific questions. Computational and applied mathematical sciences, the scientific disciplines that occupy SIAM members, are particularly critical to addressing U.S. competitiveness and security challenges across a broad array of fields: medicine, engineering, technology, biology, chemistry, computer science, and others. SIAM recognizes the challenging fiscal situation, and notes that in the face of economic peril, federal investments in mathematics, science, and engineering remain crucial as they power innovation and economic growth upon which our economy and fiscal health depend.

National Science Foundation

NSF provides essential federal support for applied mathematics and computational science, including more than 60 percent of all federal support for basic academic research in the mathematical sciences. Of particular importance to SIAM, NSF funding supports the development of new mathematical models and computational algorithms, which are critical to making substantial advances in such fields as neuroscience, energy technologies, genomics, analysis and control of risk, and nanotechnology. In addition, new techniques developed in mathematics and computing research often have direct application in industry. Modern life as we know it – from search engines like Google to the design of modern aircraft, from financial markets to medical imaging – would not be possible without the techniques developed by mathematicians and computational scientists. NSF also supports mathematics education at all levels, ensuring that the next generation of the U.S. workforce is appropriately trained to participate in cutting-edge technological sectors and that students are attracted to careers in mathematics and computing.

Below are highlights of the main budgetary and programmatic components at NSF that support applied mathematics and computational science.

NSF Division of Mathematical Sciences

The NSF Division of Mathematical Sciences (DMS) in the Directorate for Mathematical and Physical Sciences (MPS) provides the core support for all mathematical sciences. DMS supports

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SOCIETY for INDUSTRIAL and APPLIED MATHEMATICS

3600 Market Street, 6th Floor
Philadelphia, PA 19104-2688 USA
Phone +1-215-382-9800
Fax +1-215-386-7999
www.siam.org · siam@siam.org

areas such as algebra, analysis, applied mathematics, combinatorics, computational mathematics, foundations, geometry, mathematical biology, number theory, probability, statistics, and topology. In addition, DMS supports national mathematical science research institutes; infrastructure, including workshops, conferences, and equipment; and postdoctoral, graduate, and undergraduate training opportunities.

The activities supported by DMS and performed by SIAM members, such as modeling, analysis, algorithms, and simulation, provide new ways of obtaining insight into the nature of complex phenomena, such as the power grid, software for military applications, the human body, and energy efficient building systems. ***SIAM strongly urges you to provide DMS with the highest possible funding level to enable sustained investment by NSF in critical mathematical research and related mathematical education and workforce development programs.***

In particular, investment in DMS is critical because of the foundational and cross-cutting role that mathematics and computational science play in sustaining the nation's economic competitiveness and national security, and in making substantial advances on societal challenges such as energy, the environment, and public health. NSF, with its support of a broad range of scientific areas, plays an important role in bringing U.S. expertise together in interdisciplinary initiatives that bear on these challenges. DMS has traditionally played a central role in such cross-NSF efforts, with programs supporting the interface of mathematics with a variety of other fields. SIAM endorses DMS participation in NSF-wide initiatives such as Secure and Trustworthy Cyberspace (SaTC), to advance cybersecurity, and Cyber-enabled Materials and Manufacturing for Smart Systems (CEMMSS), to develop computational tools for transforming materials discovery.

NSF Division of Advanced Cyberinfrastructure

Work in applied mathematics and computational science is critical to enabling effective use of the rapid advances in information technology and cyberinfrastructure. Programs in the NSF Division of Advanced Cyberinfrastructure (ACI) in the Directorate for Computer and Information Science and Engineering (CISE) focus on providing research communities access to advanced computing capabilities to convert data to knowledge and increase our understanding through computational simulation and prediction.

SIAM strongly urges you to provide ACI with the highest possible level of funding to invest in the computational resources and science needed to solve complex science and engineering problems. In addition, SIAM strongly endorses ACI's role as steward for computational science across NSF, strengthening NSF support for relevant activities and driving universities to improve their research and education programs in this multidisciplinary area.



SOCIETY for INDUSTRIAL and APPLIED MATHEMATICS

3600 Market Street, 6th Floor
Philadelphia, PA 19104-2688 USA
Phone +1-215-382-9800
Fax +1-215-386-7999
www.siam.org · siam@siam.org

SIAM strongly supports ACI data activities, including data infrastructure, tools, and repositories, as well as the NSF-wide Big Data initiative. The explosion in data available to scientists from advances in experimental equipment, simulation techniques, and computer power is well known, and applied mathematics has an important role to play in developing the methods and tools to translate this shower of numbers into new knowledge. The programs in ACI that support work on software and applications for the next generation of supercomputers and other cyberinfrastructure systems are also very important to enable effective use of advances in hardware, to facilitate applications that tackle key scientific questions, and to better understand increasingly complex software systems.

SIAM continues to support the agency-wide initiative Cyberinfrastructure Framework for 21st Century Science and Engineering (CIF21). This program works to develop comprehensive, integrated, sustainable, and secure cyberinfrastructure to accelerate research and capabilities in computational and data-intensive science and engineering.

Supporting the Pipeline of Mathematicians and Scientists

Investing in the education and development of young scientists and engineers is a critical role of NSF and a major step the federal government can take to ensure the future prosperity and welfare of the U.S. Currently, the economic situation is negatively affecting the job opportunities for young mathematicians at universities, companies, and other research organizations. It is not only the young mathematicians who are not being hired that suffer from these cutbacks. The research community at large suffers from the loss of ideas and energy that these graduate students, postdoctoral fellows, and early career researchers bring to the field and the country suffers from the lost innovation.

In light of this situation, SIAM strongly supports significant funding for the Graduate Research Fellowship (GRF) program and the Faculty Early Career Development (CAREER) program. Strong investments in these programs will support thousands of new graduate students, which will help develop the country's next generation of scientists.

Before reaching the graduate and early career stage, young mathematicians and scientists gain critical interests and skills as undergraduates. SIAM supports efforts by NSF to improve undergraduate science, technology, engineering, and mathematics (STEM) education, and notes the key role that mathematicians play in training for these fields. SIAM strongly supports the proposed NSF and Department of Education initiative to improve K-16 mathematics teaching and learning. As interdisciplinary research questions become increasingly central to scientific progress, students need early exposure to research experiences and interdisciplinary challenges. SIAM also strongly supports the NSF Expeditions in Education (E²) initiative to link NSF research and education activities to enable hands-on learning on cutting-edge systems and catalyze student engagement.

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 SOCIETY for INDUSTRIAL and APPLIED MATHEMATICS

 3600 Market Street, 6th Floor
 Philadelphia, PA 19104-2688 USA
 Phone +1-215-382-9800
 Fax +1-215-386-7999
www.siam.org • siam@siam.org

Mathematics and International Science and Engineering

Science knows no borders, and nowhere is this truer than in mathematics. Mathematical research typically advances through the close collaboration of small groups of researchers, without the need for expensive equipment and using universal mathematical notation to minimize language obstacles. In addition, mathematics, as an enabling discipline for all of science and technology, and as a foundation for science education, plays a key role in addressing many of the most challenging problems that the world faces, such as infectious disease and sustainable energy generation. International scientific cooperation is not just good science, however; it can also foster understanding and goodwill between societies more broadly. Mathematical and scientific activities can aid in promoting United States international policy goals by building relationships and trust with other countries, enhancing the global image of America, and spurring global development.

SIAM believes strongly in the federal government's support of international science and technology initiatives that help advance U.S. foreign policy and security, including cooperative research programs that further scientific knowledge applicable to major societal challenges, promote development of research and education capabilities abroad, and introduce U.S. students to global issues and collaborative relationships.

Conclusion

We would like to conclude by thanking you again for your ongoing support of NSF that enables the research and education communities it supports, including thousands of SIAM members, to undertake activities that contribute to the health, security, and economic strength of the U.S. NSF needs sustained annual funding to maintain our competitive edge in science and technology, and therefore we respectfully ask that you continue robust support of these critical programs in FY 2014.

We appreciate the opportunity to provide testimony to the Committee on behalf of SIAM. SIAM looks forward to providing any additional information or assistance you may ask of us during the FY 2014 appropriations process.

Written Statement

Larry Swanson, President, Society for Neuroscience

(202) 962-4000 - Email: advocacy@sfn.org

Subcommittee on Commerce, Justice, Science, and Related Agencies

Appropriations Committee, United States House of Representatives

In support of the FY2014 Appropriations for the National Science Foundation

March 21, 2013

Introduction

Mr. Chairman and Members of the Subcommittee, my name is Larry Swanson, Ph.D. I am the Milo Don and Lucille Appleman Professor of Biological Sciences at University of Southern California. Over the past 30 years, my work has focused on the structure and organization of neural structures involved in motivated and emotional behaviors, as well as the development of a wiring diagram of the nervous system more generally. This statement is in support of increased funding for the National Science Foundation (NSF) for fiscal year 2014.

On behalf of the nearly 42,000 members of the Society for Neuroscience (SfN), thank you for your past support of neuroscience research at NSF. SfN's mission is to advance the understanding of the brain and the nervous system; provide professional development activities, information and educational resources; promote public information and general education; and inform legislators and other policymakers.

This subcommittee's recent efforts to establish the Interagency Working Group on Neuroscience has helped elevate brain-related research at the national level. As neuroscientists, we are excited to know that our nation's leaders are interested in the work we're doing and stand ready to help policymakers shape policies rooted in sound science that will help drive neuroscience research in the years to come.

This is an exciting time to be a neuroscientist. Advances in understanding brain development, imaging, genomics, circuit function, computational neuroscience, neural engineering, and many other disciplines are leading to discoveries that were impossible even a few years ago. Many of these discoveries are being made by neuroscientists who can trace their first grant back to NSF on their way to becoming independently funded investigators.

Resources provided to NSF will support the nation's best and brightest researchers at the forefront of promising discoveries, graduate students at the start of their careers, and the development of advanced scientific tools and infrastructure that will be broadly available to the research community. These researchers are the ones who will be answering some of the vexing questions facing the field of neuroscience: what are the genetic, cellular, and molecular mechanisms responsible for brain development? How do biology and our external environment and stimuli intersect to affect the way our brains function? How will new tools such as brain-machine interfaces, computational models, and advanced imaging techniques enhance the effectiveness of the field, deepen scientific capacity for inquiry, and contribute to better health and quality of life in the years ahead?

Now is the time to take advantage of scientific momentum, to pave the way for improved human health, to advance scientific discovery and innovation, and to promote America's near-term and

long-range economic strength. These goals require robust investments in NSF that reverse the tide of stagnant and shrinking funding. Virtually every directorate at NSF supports neuroscience research. NSF continues to search for new ways to encourage and incentivize creativity and integration across disciplines when it comes to neuroscience. This is evident in the recent NSF “Dear Colleague Letter” aimed at “Accelerating Integrative Research in Neuroscience and Cognitive Science.” SfN is very grateful for NSF’s continued recognition of and support for cross-disciplinary approaches, and we believe neuroscience is an exceptional example of ways the life and physical sciences intersect and complement one another.

Seizing this moment can only happen if labs are able to pursue promising leads and innovative ideas can move forward. A constricted fiscal environment—compounded by sequestration—could stand in the way of that progress. It’s impossible to say what breakthroughs will go undiscovered, but there is no doubt that this fiscal environment will result in delayed discoveries, with potentially huge opportunity costs for human health.

Fiscal Year 2014 Budget Request

Last year, the Society stood with others in the research community in requesting at least \$7.4 billion for NSF. Today, the need is no less as the funding situation is even more precarious, and the Society urges Congress to reverse the current course and find ways to invest more in scientific research. We urge Congress to act before the full effects of sequestration take hold, further eroding the short- and long-term capacity for discovery. Let’s work to put research on a trajectory of sustained growth that recognizes its promise and opportunity as a tool for economic growth and, more importantly, for advancing the health of Americans.

Sustained growth in funding will enable the field to serve the long-term needs of the nation by continuing to advance science, improve health, and promote America’s near-term and long-range economic strength by investing in the proven economic engine of discovery. Continued investment in basic research at NSF is essential to laying the groundwork for discoveries that will inspire scientific pursuit and technological innovation for future generations.

As noted above, NSF is a primary catalyst for understanding the connection between the life and physical sciences. Whereas National Institutes of Health (NIH) may focus on basic research with an orientation toward a disease or health-related focus, NSF-supported neuroscience research is more likely to focus on specific functions of the brain, not necessarily tied to a specific disease or disorder. What’s more, the “physical sciences” work supported by NSF has enabled the development of new technologies that have revolutionized neuroscience research in recent years.

Aggressive investment in technology and scientific research is crucial to ensure America sustains its global leadership and competitiveness. Science is now a truly global enterprise that has the potential to revolutionize human knowledge, health, and wellness—the question is whether the U.S. will maintain its role leading the next generation of scientific advances.

As the committee works to set funding levels for critical research initiatives for fiscal year 2014 and beyond, we ask you to help establish a national commitment to advance the understanding of the brain and the nervous system—an effort that will transform the lives of millions of people living with diseases and disorders of the nervous system. Help us to fulfill our commitment to

overcoming the most difficult obstacles impeding progress and to identifying critical new directions in basic neuroscience.

Neuroscience and NSF

SfN supports an increase in the budget of NSF because NSF-funded research is at the forefront of improving our understanding of neuroregeneration and rehabilitation, neuroimaging, and brain-computer interface to name but a few.

The power of fundamental science unlocks the mysteries of the human body by exploring the structure and function of molecules, genes, cells, systems, and complex behaviors. Every day, neuroscientists advance scientific knowledge and medical innovation by expanding our knowledge of the human brain. Researchers exploit these findings to identify new applications that foster scientific discovery which can lead to ground-breaking medical treatments. Basic (also known as fundamental) research funded by the NSF continues to be essential for discoveries that will inspire scientific pursuit and medical progress for generations to come. Due to federally funded research, scientists and health care providers have a much better understanding of how the brain functions.

NSF-supported work is essential for the future of neuroscience. For example, the “brainbow” uses complex genetic engineering to label neighboring neurons in different colors, making them easier to differentiate and trace their connections. Such advances have only been possible within the last decade. But being able to trace these connections also highlights an increasingly common and complex problem—how to handle vast amounts of data that are collected. To store the images necessary to form a picture of 1 cubic millimeter of a mouse brain—about the size of the eye of a needle—would require the equivalent of 212,000 DVDs. NSF is leading the way in such computational research.

We cannot rely on private industry to fund these ideas. Given the long-term path of basic science and industry’s need for shorter-term return on investment, private industry depends on federally-funded research to create a strong foundation for applied research. As noted in a report issued by NSF in November 2012, research and development through universities, much of it driven by NSF, totaled more than \$65 billion in fiscal year 2011. The life sciences were a primary driver of that growth. This demonstrates the “force multiplier” that is investment in basic research. And that is why increasing the investment in research—from the most basic to the translational—is so essential.

The following are just two of the many basic research success stories in neuroscience emerging now thanks to strong historic investment in NSF and other research agencies:

A New Model for Complex Brain Disease

A new development from basic science shows tremendous potential for improving understanding of complex diseases such as Alzheimer’s, which affects 5.4 million Americans and costs the United States \$200 billion in direct costs annually.

Traditionally, human disease is modeled by identifying and studying single gene mutations that run in families. Brain cells from mice genetically engineered to express this mutated gene can be studied to help illuminate the complex interactions that produce the disease.

Unfortunately for the ease of understanding these diseases, single gene mutations are not the only way to develop most diseases. With Alzheimer's disease, most cases are likely caused by mutations in many different genes. Thus, current models of Alzheimer's likely paint an incomplete picture of the disease.

New developments in stem cell technology are changing this picture. Stem cells are special cells that have the potential to become any other type of cell in the body. Due to advances in genetic engineering, scientists can now trick almost any cell into becoming a stem cell. This technique can be used to turn skin cells from patients with idiopathic Alzheimer's disease into brain cells. These cells are nearly identical to the cells that are in that person's brain, complete with that person's unique genetic risk profile. Research with these cells could potentially help identify subgroups of patients who will respond differently to treatment in clinical trials.

For now, it is not clear whether the brain cells made from this technique are completely identical to the neurons in the brain of Alzheimer's disease patients. In addition, these cells are currently prohibitively difficult to create, making them unlikely to replace embryonic stem cells in other applications in the near future. Continued research funding will allow scientists to begin addressing these and other outstanding questions. This research exemplifies the powerful potential to apply basic research well beyond its original intent.

The "Connectome"

Current knowledge about the intricate patterns connecting brain cells (the "connectome") is extremely limited. Yet identifying these patterns and understanding the fundamental wiring diagram or architectural principles of brain circuitry is essential to understanding how the brain functions when healthy and how it fails to function when injured or diseased. Recent research suggests that some brain disorders, like autism and schizophrenia, may result from errors in the development of neural circuits. This research suggests a new category of brain disorders called "disconnection" syndromes.

Advanced technologies, along with faster and more data-efficient computers, now make it possible to trace the connections between individual neurons in animal models providing us with greater insight into brain dysfunction in mental health disorders and neurological disease. Scientists have already used these technologies to examine disease-related circuitry in rodent models of Parkinson's disease. Their findings helped explain how a new treatment called deep brain stimulation works in people, and are being explored for treatments of other diseases.

The Future of American Science

As the subcommittee considers this year's funding levels, please consider that significant advancements in the biomedical sciences often come from young investigators. The current funding environment is taking a toll on the energy and resilience of these young people. America's scientific enterprise—and its global leadership—has been built over generations. NSF alone has awarded over 46,500 Graduate Research Fellowships since 1952. Many young

neuroscientists receive their first grants from NSF on their way to having careers as independently funded investigators. Without sustained investment, we will quickly lose that leadership. The culture of entrepreneurship and curiosity-driven research could be hindered for decades.

We live at a time of extraordinary opportunity in neuroscience. A myriad of questions once impossible to consider are now within reach because of new technologies, an ever-expanding knowledge base, and a willingness to embrace many disciplines.

To take advantage of the opportunities in neuroscience we need an NSF appropriation that allows for sustained, reliable growth. We have entered an era where knowledge of nerve cell function has brought us to the threshold of a more profound understanding of behavior and of the mysteries of the human mind. This understanding, in turn, will lead to improved health for the American public and will help maintain American leadership in science worldwide. Thank you for this opportunity to testify.

TESTIMONY OF

Bob Beal, Executive Director, ASMFC

On Fiscal Year 2014 Budget
House Committee on Appropriations
Subcommittee on Commerce, Justice, Science and Related Agencies
March 21, 2013

The Atlantic States Marine Fisheries Commission (ASMFC) hereby submits the following written testimony for the record on the Fiscal Year 2014 (FY14) Budget.

The three Interstate Marine Fisheries Commissions (ASMFC, GSMFC and PSMFC) and the twenty seven coastal states they collectively represent strongly support \$2.5 million in funding for the Inter Jurisdictional Fisheries Act (IJFA) in FY14 as well as \$32 million for the “Regional Councils and Fisheries Commissions” line items within the National Ocean and Atmospheric Administration’s (NOAA)/National Marine Fisheries Service (NMFS) budget in the Commerce, Science, Justice Appropriations Act for FY14.

IJFA Funding

The President’s Fiscal Year 2013 Budget Request proposed to terminate the IJFA Grants to States program, and it is currently unknown what will be included in the President’s FY14 Budget Request. The IJFA was established by Congress to promote and encourage state activities in support of the management of inter-jurisdictional fishery resources throughout their range. Funding under the IJFA supports the monitoring and assessment programs of the States and Interstate Commissions, as well as funding for research that gauge the health of commercially and recreationally important fish stocks. The IJFA is a matching grant program. Funds received by the States must be matched on a dollar-for-dollar basis. This is a classic example of an effective and affordable federal/state partnership for the management of near shore fisheries with inter-jurisdictional boundaries. The Administration used its discretion to allocate “unspecified reductions” within the 2012 NOAA Spend Plan to eliminate the IJFA grants for 2012. During consideration of the Commerce-Justice-Science appropriations for Fiscal Year 2013, as part of the Continuing Resolution, Congress restored the IJFA program to \$2 million. The three Interstate Marine Fisheries Commissions strongly support this action.

NOAA is currently going through a painful process of reducing its budget to conform to the Sequestration budget targets. **In an era of declining budgets, programs such as the IJFA that approach a dollar-for-dollar match should be fostered because they maximize the financial resources available for marine conservation and management. Authorizing and appropriating \$2.5 million annually for the IJFA results in an equal financial commitment from the States.**

“Regional Councils and Fisheries Commissions”

The President’s FY13 Budget also calls for \$27,349,000 for the “Regional Councils and Fisheries Commissions” NOAA line item in Fiscal Year 2013, a reduction of roughly \$4.5 million over the levels enacted in FY12. The Regional Councils are the workhorses of the Federal regulatory process for marine fisheries. Each Council is working to revise the fishery management plans under its jurisdiction to end overfishing and rebuild fish stocks. The ability of the Councils and Commissions to fulfill their statutory mandates will be severely hampered by the proposed cutbacks. As part of the Continuing Resolution, the Conferees have proposed an appropriation of \$31, 555,000 for the “Regional Councils and Fisheries Commissions” line item. The three Interstate Marine Fisheries Commissions strongly support this level of funding.

Commission Activities Supported by IJFA and “Councils and Commissions”

Pacific Region

IJFA funds are used by the PSMFC to coordinate the Tri-State Dungeness Crab Fishery. With a landings value in 2011 of over \$185 million, Dungeness Crab is the most valuable crab fishery in the U.S. It is managed on an inter-jurisdictional basis with funding from the IJFA. This was a federal fishery delegated to the States of Washington, Oregon, and California for management under the Magnuson-Stevens Act. If funding for this management regime ceases, NOAA will be forced to take the fishery back to the Pacific Fishery Management Council to develop a new fishery management plan.

PSMFC and the West Coast states also use their IJFA matching grants to engage in a wide range of other activities, including the conduct of rockfish surveys and tagging projects on the West Coast; management of the Pink Shrimp Fishery; management of the coastal pelagic species fisheries (Pacific Sardines, Pacific Mackerel, and Jack Mackerel account for 86,000 tons of commercial catch in California); research on the abundance and migratory patterns of steelhead on the Snake River; spawning and catch sampling of Pink, Chum, and Coho in Southeast Alaska; and conservation of coastal cutthroat trout (an ESA listed species); and technical support for the U.S.-Canada Groundfish Committee, which is tasked with inter-jurisdictional management cooperation for groundfish that border both nations.

The potential additional cuts in funding in the Councils/Commissions line item will reduce public participation in the North Pacific and Pacific Fishery Management Councils. Each Council currently meets five times per year. The proposed cuts would result in at least one of the meetings and possibly two being cancelled. The Councils will be required to reducing staffing by 25 percent. This will result in less public outreach and lower stakeholder input. With fewer meetings and less staff to analyze and present scientific information to Council Members, the Councils will be forced to err on the side of caution, resulting in smaller quotas and quicker fishery closures. This will result in lost jobs in the fishing and seafood processing industries, less sport fishing time, and a reduction in taxes to Federal, State, and Local Governments. The North Pacific Council will have to slow down its work in resolving halibut and salmon bycatch issues; the halibut catch sharing plan; and the implementation of new regulatory amendments to address safety issues in the factory longline fishing fleet. The Pacific Council will be hampered

in its ability to regulate the Sacramento River fall Chinook fishery, which is currently experiencing a rebound from the fishery disasters of 2008 and 2009.

Gulf Region

In the Gulf of Mexico, the IJFA is the cornerstone for the states' fishery management programs and has provided support for the five Gulf States' long-term databases for commercial and non-commercial crustaceans and finfish in the Gulf of Mexico. State and federal stock assessments are increasingly utilizing the fishery-independent databases and will be critical to future regional management success and provide the States' the ability to gauge the health of commercially and recreationally important fish stocks in their waters. As new stock assessment methodologies, such as ecosystem and food web approaches to fisheries management are explored and implemented, these state-derived fishery-independent data will be even more important. However, the ability to conduct stock assessments will hinge upon the quality and duration of these datasets which have been supported by the IJFA.

Under the IJFA language, the appropriations provided to the states to support their respective fisheries monitoring programs are determined by a formula based on a state's total marine fisheries landings. Based on the 2011 appropriations, the maximum allocation that any state could receive was approximately \$100,000 and the minimum was approximately \$8,000. The Gulf of Mexico had three 'maximum' states by volume and value. In the Gulf region, nearshore species such as Spanish mackerel, striped mullet, blue crab, and oyster comprise the majority of the commercial and recreational harvest, resulting in significant social and economic benefits to the states and the nation. In 2009, prior to BP's Deepwater Horizon disaster, 82% of the Gulf's total commercial fishery value was derived from state waters. Finally, the IJFA also allows Congress to provide assistance to the states in the event of a Fisheries Disaster under SEC. 113 in the form of funds and other economic assistance and does not require state match for financial relief such as the emergency disaster relief funding package following hurricanes Katrina and Rita in 2005.

The loss of IJFA funds in the Gulf region in 2011 and 2012 has resulted in drastically reduced support for the monitoring of our shrimp, crab, and finfish fisheries. The loss of IJFA has resulted in the elimination of other funding sources under the 1-for-1 match requirement, including contributions from limited state license revenues. Florida has lost three positions from their blue crab, shrimp, and horseshoe crab program which represents 40% of their crustacean research staff. Texas has reprioritized other funding to determine the status of their shellfish populations for formulating shellfish management and harvest regulations in coastal waters. Louisiana will be reprioritizing their sampling programs which may slow the development of appropriate management recommendations. Mississippi has been forced to reduce efforts in other state fishery programs to make up the difference to continue collecting long-term fishery-independent data. Alabama reports that the loss of IJFA funding has resulted in less efficient enforcement related to Alabama and Gulf of Mexico fisheries and the interactions of fishing activities among protected species.

In addition to the five States' fisheries monitoring, the IJFA also provides funding for the GSMFC to regionally coordinate inshore, state water fishery resources by the development of regional Fishery Management Plans (FMP). The FMPs are used by the states to enact

appropriate management strategies with conservation standards intended to maintain sustainable stocks into the future and provide coordinated support to get these management measures passed through their respective state commissions and/or legislative bodies. The GSMFC currently has 16 species under management plans or profiles with 10 additional species identified for future plan development. Future reauthorizations of the IJFA should be taken into consideration funding levels appropriate to the cost of fisheries management for today and beyond.

Atlantic Region

The fiscal resources available to ASMFC have been nearly static, and diminished in some areas, during the past decade. However, the demands of stakeholders, the necessary rigor of stock assessments, and the simple cost of administering and maintaining the transparency of the ASMFC process has increased. This contrast between funding and demands has required the ASMFC to prioritize activities at the expense of stock assessments and fishery management updates. This constraining of the ASMFC's budget is occurring at a time of unprecedented state budget cuts and threatens to limit the effectiveness of the ASMFC process and interstate management along the Atlantic coast.

The ASMFC process is extremely efficient and produces a high return on investment. With a budget of under \$10 million annually, the ASMFC manages 25 species that generate billions of dollars of economic activity from Maine through Florida. In fact, 35% of the total commercial landings value from Atlantic fisheries in 2011 was attributed to landings within 3 miles of shore. Over 90% of the Atlantic coast recreational catch is taken in state waters. This investment by Congress and the states in the ASMFC process likely represents one of the best return rates in all natural resource management. Continued investment in interjurisdictional management along the Atlantic coast will fund data collection and assessments to support better management decisions and restoration of stocks. Improved management will create more fishing opportunities and jobs and strengthen economic activity for Atlantic coastal communities.

The IJFA grants, though some may be small, have been successfully leveraged by the states to boost their survey, data collection, and monitoring abilities, including northern shrimp and American lobster sampling in New England; monitoring state quotas of black sea bass, summer flounder, and striped bass in the Mid-Atlantic; and surveying flounders, drum, shrimp and crabs in the South Atlantic. The program is a matching grant program, so the funds received by the states must be matched dollar to dollar.

The Atlantic Coastal Fisheries Cooperative Management Act (Atlantic Coastal Act) requires the Atlantic states to develop FMPs through the ASMFC and to implement and enforce those plans under state law, under penalty of pre-emption of a state's fishery by the Secretary of Commerce. The continued reduction in "Regional Councils and Commissions" funding would reduce the capacity of the ASMFC as well as its member states to develop, implement, and enforce FMPs. "Regional Councils and Fisheries Commissions" funding goes to help provide valuable sources of data that allow fisheries managers to achieve sustainability for commercial and recreational fisheries, generating billions of dollars of economic activity. Further budget cuts to the program would force the ASMFC to eliminate one of four ASMFC meetings, cancel stock assessment training for state scientists, delay (one year) benchmark stock assessments for American lobster, Atlantic striped bass, and northern shrimp, eliminate a stock assessment

scientist position, suspend outreach activities, and reduce FMP coordination capacity. The resultant impact would reduce the opportunity for public engagement in the management process; decrease the quantity, quality, and timeliness of scientific advice; and reduce the ASMFC's responsiveness to fisheries management issues. Greater scientific uncertainty would likely result in more precautionary management decisions, with consequent opportunity costs to commercial and recreational harvesters due to lower quotas and shorter seasons. Greater uncertainty also may decrease the justification for ASMFC actions, potentially resulting in legal vulnerability. Through the ASMFC process, states have reduced the number of overfished species by over 50% during the past decade; further progress towards rebuilding overfished species will be hampered by budget cuts and resulting lack of data and slowed response time.

Cutting Atlantic Coastal Act grants to the states would reduce the fisheries management and science activities needed to comply with the provisions of the Act. States use these funds to conduct nearshore fisheries surveys, assess stocks, monitor catches, and interact with stakeholders to implement and enforce the fisheries management measures approved by the ASMFC. For New England states, this would result in a loss of the ability to accurately track landings for quota management, prompting more precautionary management and potential triggering of accountability measures. Within the Mid-Atlantic region, lack of funding would lead to a direct loss of law enforcement presence. In addition, funding supports monitoring and management of important state and interstate fisheries, such as blue crab and horseshoe crab in Delaware, and red drum, Atlantic menhaden, and flounders in North Carolina. South Atlantic states use the funding to support both fishery monitoring and independent surveys, including Georgia's long-time trawl survey, which has been collecting data on shrimp, crabs, and finfish since the 1970s. In addition, funding supports data collection of bycatch, including protected species like sea turtles and Atlantic sturgeon, throughout the Mid- and South Atlantic.

On the federal side, there are three East Coast fishery management councils. The Administration's proposed 22% funding reduction (from FY12 to FY13) for the "Regional Councils and Fisheries Commissions" funding line item would reduce their capacity to engage stakeholders in development of FMPs and annual harvest levels. These cuts would reduce the number of meetings of each Council by at least one meeting per year; it would impact meetings of their Statistical and Science Committees and stakeholder advisory panels. These cuts would reduce scientific staff capacity to support crucial management questions and reduce FMP coordination capacity. The resultant impacts, similar to those for the ASMFC, would restrict opportunities for public involvement in the management process and decrease scientific advice available to managers, resulting in negative impacts on the Councils' ability to fulfill the requirements under the Magnuson-Stevens Fishery Conservation and Management Act. Further, the Councils' response to stakeholder input and their ability to make the necessary updates to NOAA's improved recreational data collection program and annual catch limits will be delayed or diminished.

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Office of the Chancellor
Swarlund Administration Building
601 East John Street
Champaign, IL 61820



Phyllis M. Wise Chancellor

March 21, 2013

*The Honorable Frank R. Wolf, Chairman
The Honorable Chaka Fattah, Ranking Member
Subcommittee on Commerce, Justice, Science, and Related Agencies
House Committee on Appropriations
H-309, the Capitol
Washington, DC 20515*

Chairman Wolf, Ranking Member Fattah, and Members of the Subcommittee:

The University of Illinois at Urbana-Champaign is one of the nation's premier, research-intensive universities. We develop new technologies, we pioneer innovations across the sciences, and we award thousands of undergraduate and graduate degrees each year. Our scholarship, teaching and engagement touch the lives of millions of people. I am submitting this testimony to voice my deep concerns about the sustained negative impacts that insufficient federal support of the National Science Foundation (NSF) would have, not just on my university, but on the entire basic research infrastructure of the nation. Clearly, we are in a difficult fiscal environment, but federal investment in the NSF at the highest level possible is essential to our nation's long-term economic health and competitiveness.

Basic scientific discovery forms the critical foundation for the innovations that improve the lives of people both in the United States and around the globe. Tomorrow's new cancer treatments, quantum computers, or super-efficient solar cells will trace their origin back to fundamental scientific research that decoded a genome, mathematically characterized the spin of a subatomic particle or designed a technique to fabricate materials on the nanoscale. This is the hard work of discovery and the point where true breakthroughs are born. This is where American research universities lead the world. Our universities have always been incubators of discovery and innovation. They drive our economy and fuel our global preeminence. And much of that leadership has come about because of the steady and strategic investment by our nation through the NSF.

These strategic federal investments provide economic and social growth measured over lifetimes and generations. Departure from this long-standing national commitment will have an immediate and chilling impact on work that is ongoing, on the educational experiences of students who would be the next generation of scientific leaders, and most certainly stunt economic development and growth as the pipeline for innovation is halted. From supercomputer climate models that help predict and mitigate the next Sandy or Katrina to genetics pioneering that help bring food security to the world – real advances with real implications are in jeopardy.

I want to highlight just a few examples of NSF-funded innovations, educational experiences and new job creation efforts at the University of Illinois at Urbana-Champaign. These are just a snapshot sampled from one institution today. Multiply that by hundreds of universities over decades and you begin to see the impacts of strategic federal investment in higher education and research.

Funding for Basic Research and the Infrastructure of Discovery

NSF support of public research is certainly critical to the fundamental advancement of science – funding research that results in the paper, or the theory or the discovery that becomes a building block for the next iteration that the next researcher will use. But, it is also a main source of funding for the national infrastructure that distributes broad, collaborative access to expensive and scarce tools and technologies such as supercomputers, accelerators, and massive data collections. These components are important to the process of innovation and discovery.

Examples of NSF-supported advances in basic science

Electronic Tattoos. Engineering faculty from the University of Illinois at Urbana-Champaign have developed a device that combines electronic components for sensing, medical diagnostics, communications and human-machine interfaces, all on an ultrathin skin-like patch that mounts directly onto the skin with the ease, flexibility, and comfort of a temporary tattoo. These wearable electronics bend, wrinkle, and stretch with the mechanical properties of skin, and are almost unnoticeable to the wearer. Skin-mounted electronics have many biomedical applications, including EEG and EMG sensors to monitor nerve and muscle activity.

“Bio-Bots.” Designing non-electronic biological machines has been a riddle that scientists at the interface of biology and engineering have struggled to solve, but Illinois researchers supported by NSF funding have done so, creating so-called “bio-bots”; soft, biocompatible machines, about 7 millimeters long, that incredibly, are able to walk by themselves. With an altered design, the bio-bots could be customized for specific applications in medicine, energy, or the environment. They might be used for drug screening or chemical analysis, since the bots’ motion can indicate how the cells are responding to the environment. By integrating cells that respond to certain stimuli, such as chemical gradients, the bio-bots could be used as sensors.

Examples of NSF-funded collaborative scientific infrastructure

Blue Waters, which is now fully online, puts the most powerful academic supercomputer in the world at the disposal of scientists around the nation. Researchers all over the country now have access to a tool that will let them do everything from modeling biological systems – perhaps down to the behavior of individual atoms – to simulating the evolution of the universe. Blue Waters offers new possibilities for our ability to better understand and predict natural events such as super storms and earthquakes.

Extreme Science and Engineering Discovery Environment (XSEDE) is a partnership of 17 institutions, including the University of Illinois at Urbana-Champaign, to create the most powerful and robust collection of integrated advanced digital resources and services in the world. Researchers will be able to use this integrated network of supercomputers, data and software tools to advance their work in fields like earthquake engineering, materials science, medicine, epidemiology, genomics, astronomy, and biology.

Educating the Next Generation of Scientific Leaders

While NSF may be best known for supporting research activity and for funding scientific infrastructure, the agency also funds, directly and indirectly, the educational mission of our universities to train the next generation of researchers. Thousands of graduate students and postdoctoral researchers each year are supported in some way by NSF grants at research universities across the country. They are active and key members of the teams that are pushing the edges of science in our facilities. The skills and experiences they acquire in these efforts move with them into their future careers, in and out of universities.

But NSF has also established programs that are specifically targeted to provide new opportunities for graduate student experiences and education in certain emerging fields or disciplines. Integrative Graduate Education and Research Traineeships (IGERTs) prepare students for collaborative work that blurs the boundaries between disciplines as diverse as biology, psychology, and engineering. These programs encourage young scientists to become leaders and to break traditional departmental barriers. Nationally, well over 6,000 students have been funded through these initiatives. These are the faculty members and corporate technology leaders of the coming decades. At Illinois, more than 50 students will benefit from participation in one of three current IGERT programs.

The Cellular and Molecular Mechanics and BioNanotechnology IGERT integrates biology and medicine with micro and nanotechnology. These trainees are exploring how micro/nano-fabrication can help solve problems in life sciences (such as diagnostics, therapeutics, and tissue engineering) and how we can learn more from life science to solve important problems in micro/nanoscience and in engineering (such as bio-inspired self-assembly).

The Vertically Integrated Training with Genomics IGERT will address two "grand challenges" in biology: *How do genomes interact with the environment to produce biological diversity?* and *How are biological systems integrated from molecules to ecosystems?* Answering these questions will help both science and society determine how to maintain food security under climate change, how we integrate genetics and ecology to study emerging infectious diseases, and how organisms' responses to climate change influence biodiversity and ecosystem function.

The Neuroengineering IGERT program at Illinois trains graduate students in engineering and neuroscience to attack problems with a combination of scientific and engineering viewpoints. Students will focus on three thrusts: audition, neuroimaging, and novel brain-machine interfaces.

In addition to the formal programs like these which prepare the research leaders of the future for both the public and private sector, NSF projects all carry broad educational components that are directly and indirectly enhancing student performance in STEM-fields – particularly at the undergraduate level. This is not a minor achievement. It is a critical factor in developing the United States workforce that we will need to contend with everything from national cybersecurity to international competition in high tech industries. Again, these NSF investments have outcomes that will be measured over decades; and ones where gaps will result in a permanent loss of our competitive advantage.

A Catalyst for Economic Development and Job Creation

NSF support also plays an increasingly important part not just in the dissemination of research and information through scientific journals, but in the distribution of new ideas, products and technologies into the national marketplace. It is at this point of transfer from basic to applied where there is enormous potential for economic development and job growth – locally, regionally and nationally. These are the seeds of new industries, or the starting points for new branches of existing ones. From new energy economies to the rapidly emerging opportunities of personalized medicine and bioengineering in the health sciences – NSF funding is a catalyst for accelerating the traditionally slow process of concept to practice to mature industry. I offer two examples of start-up companies at Illinois that trace their origins to NSF support.

MC10 Inc. is developing processes and applications that enable high performance electronics to be placed in novel environments and form factors. MC10's approach transforms traditionally rigid, brittle semiconductors into flexible, stretchable electronics while retaining excellent electrical performance. These stretchable silicon platforms open fantastic new horizons in areas such as remote health monitoring or even actual mitigation of some conditions such as epileptic seizures.

Diagnostic Photonics is developing an ultra-high resolution, *in vivo*, microscopic imaging platform for surgical use in clinical settings. The company's technology will enable real time scanning of tumors and lymph nodes during surgery, providing immediate feedback. The result will be fewer repeat surgeries, improved prognoses, lower cost, and higher quality care.

These are just two among dozens of Illinois examples. These companies are real, ongoing concerns. They are creating new jobs and are playing key roles in establishing United States preeminence in emerging global markets. And through new, novel programs such as the NSF Innovation Corps (I-Corps), we are already seeing increases in both the number of start-ups and in the speed with which they develop on our campus. From personal glucose meters to a web-based application that improves personal financial decision-making – NSF support is quickly moving products and ideas with real societal impact from our laboratories and into the hands of individuals.

Ongoing Investment in the National Science Foundation is a National Priority

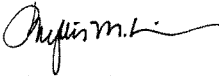
Discovery and innovation, whether in theoretical physics, chemistry or computation, are not isolated moments of inspiration. They are the result of consistent, iterative and shared experimentation and investigation. There are no shortcuts to breakthroughs in science. Each new discovery builds on the ones before it, creating a chain of knowledge and experience that informs and drives the next trial or inspires the next idea. Today, we are making new advances in electronics, in materials science, and in genomics that are fundamentally rooted in work that started decades, or in some cases, a century ago.

We have seen our national network of research universities coupled with consistent, reliable federal funding, transform our nation into a globally-envied engine of scientific innovation. Today, we face challenges more complex and on a grander societal scale than at any time in our history. From food supply to information security threats to energy allocation and sustainability, we are in an era where there are no simple answers to be found and where the window to create solutions seems to be closing rapidly. Interruptions in this chain of science and innovation bring a new level of risk and will have costs in terms of lost time and discovery that will prove difficult to recover.

I ask you to reaffirm our nation's long commitment to investment in scientific research and development and that the National Science Foundation be funded at the highest possible level. I know we are in a most-challenging fiscal environment with pressures on all aspects of the federal budget. However, NSF funding truly is the door to opportunities and growth, both educationally and economically.

This strategic investment will provide returns to the nation and to the world for generations. It is one that I urge you to maintain and to increase.

Sincerely,



Phyllis M. Wise
Chancellor



975 Carpenter Rd NE, Suite 301
Lacey, WA 98516
360.357.9975
www.wsfb.com

March 20, 2013

House Committee on Appropriations
Subcommittee on Commerce, Justice, Science, and Related Agencies
CJ.Approp@mail.house.gov

Re: Decreasing appropriations to Legal Services Corporation and similar entities

Honorable House Committee Members:

My name is Mike LaPlant, and I serve as president of Washington Farm Bureau, which is a general farm organization representing the social and economic needs of family farmers and ranchers across Washington state. On behalf of our more than 41,000 member families, I am writing to express our concerns with the way Legal Services Corporation, its grantees, and similar organizations have allocated their taxpayer-funded resources. In particular, we believe that public funding to organizations providing civil indigent legal services should be reduced or further restricted to ensure that farmers are not harassed by these organizations.

Farm Bureau is not opposed to a reasonable program to provide legal assistance to people who are at or below the poverty line. Providing access to justice is a legitimate public issue. However, current practices by legal services (LSC, its grantees, contractors, and affiliated entities) far surpass what we believe are necessary and proper for achieving this task.

For example, in recent years several of our members have found themselves at odds with legal service organizations because those members have participated in the federal H-2A foreign agricultural guest worker program. This program is heavily regulated by the U.S. Department of Labor and other agencies to such an extent that many growers do not even attempt to use it because of the high costs and bureaucratic difficulties.

Regulations ought to provide enough oversight of the program, yet growers often find themselves entangled in lawsuits filed by representatives of legal services. These lawsuits are costly for the grower who must pay for his or her own defense. The lawsuits, legitimate or not, serve as a deterrent to using a legal, federally sponsored, and federally regulated guest worker program designed to meet the ongoing labor needs of farmers and ranchers.

The domestic production of food, feed, fiber, and fuel is critical to the well-being of our nation. In order to grow the food that we need, our growers need access to a workforce that has proper legal authorization to work, that is stable and reliable for the growing season of the commodity being grown, and that is cost-effective in the context of national and international competition. Depending on the commodity, labor needs can be a seasonal harvest of fruits and vegetables, or they can be year-round work with livestock.

Even in these times of high unemployment, our growers are not finding domestic sources of labor to meet their basic needs. Family farmers and ranchers have little choice but to use federal foreign guest worker programs, which are politically and philosophically opposed by many farm worker advocate groups. But participation comes with risks, such as potential lawsuits from legal services, which cast doubt on our members' ability to farm their land now and in the future.

We ask you to take steps to decrease appropriations to Legal Services Corporation and similar entities so that these organizations cannot use the court system to make progress toward their political goals of hindering grower access to necessary workers.

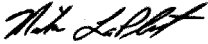
We also ask that you consider reforms to legal services or at least reexamine existing restrictions to ensure that legal service organizations focus only on helping individuals with legitimate civil needs rather than pursuing political goals through the court system. Funding should flow as directly as possible to indigent persons, rather than indirectly to LSC and other organizations. Ideas include the following:

- Require LSC groups and their staff attorneys to make a good-faith effort to get the employer and the complaining employee or employees in a face-to-face meeting for the purpose of resolving problems before a lawsuit is threatened or filed;
- Support the development of organized ways, such as alternative dispute or mediation agreements, of settling problems between agricultural employers and their employees to avoid costly lawsuits;
- Prohibit LSC attorneys and groups from filing for or receiving court and legal costs from defendants;
- Prevent frivolous claims by legal services corporations by forcing clients of legal services to pay for their legal representation using a sliding scale of at least minimum wage for the attorney's time. A judge could waive the fee in certain egregious circumstances;
- Require legal services that receive public funds or Interest on Lawyer Trust Accounts (IOLTA) funds to pay court costs for any suits they initiate and lose;
- Ensure that individual citizens or groups can file lawsuits against LSC, its grantees, and its contractors to seek damages where legal services groups have operated in violation of the law;
- Prohibit legal service organizations from offering services to people who are not legally or physically present in the United States. Require legal services to establish the person's status and document the status prior to offering services to that person;
- Prohibit the funding of LSC grantees with IOLTA funds; and,
- Prohibit lobbying by subgrantees of LSC grantees, including those that are funded by IOLTA funds.

We urge you to use this opportunity in the budget process for FY 2014 to thoroughly review Legal Services Corporation and its partners. The members of our organization need solutions for finding adequate workers and employing them within the bounds of the law. Use of public funds by LSC and others in a manner that is inconsistent with this goal undermines the ability of our growers to grow the products our nation needs.

Thank you for this opportunity to comment on this important issue.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike LaPlant". The signature is stylized with a cursive script.

Mike LaPlant
President

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